

SURVEY OF PARK AND RECREATION DIRECTORS'
PRECONCEPTIONS TOWARD UNIVERSITY RECREATION
GRADUATES WITH A DISABILITY

A THESIS

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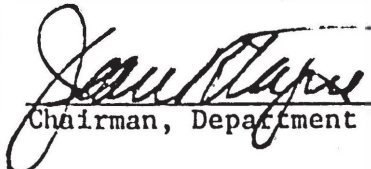
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We hereby recommend that the thesis prepared under
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Directors' Preconceptions Toward Employing University
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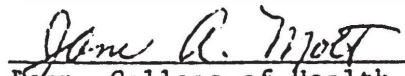
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DEDICATED TO
JAMIE & KEVIN

Yesterday a child came out to wonder . . .

-author

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CHAPTER I

INTRODUCTION TO THE STUDY

Rationale for the Study

The population of disabled persons in America is estimated at 25 to 35 million (Walton, 1980). Approximately 11% of these disabled individuals are enrolled in institutions of higher education (Bureau of Education, 1979). Most degrees have a prerequisite of 12 years of primary and secondary education and at least 4 years of university course work; some work experience is required in some degree programs. This study focused on revealing employment problems and/or potential employment opportunities for a university recreation graduate with a disability.

In a previous study, Zadny (1980) indicated that most industrial employers were willing to hire handicapped employees. The surveyed employers indicated that they would hire qualified handicapped individuals before hiring less qualified nonhandicapped applicants.

Since there are no studies represented in the literature specific to the field of recreation, the

results of this study of municipal park and recreation directors indicated whether the trend toward hiring the disabled in other fields was also evident in the field of municipal parks and recreation.

There are many barriers that face the disabled university student. In many cases, solutions can be found if the barriers are first identified. It is anticipated that this investigation will alert the recreation professional to possible problems in the employment of disabled persons and, as a result, perhaps inservice training sessions, workshops, and other modes of education will be initiated to resolve many of these problems.

Purpose of the Study

The purpose of this investigation was to determine if university recreation graduates with a disability would be considered for employment in the municipal parks and recreation system.

Statement of the Problem

The problem was to determine the preconceptions of municipal parks and recreation directors in the southwest region of the United States toward university recreation graduates with a disability as potential employees. A

questionnaire was utilized to solicit general demographic information about the directors. The investigation also included the Attitudes Toward Disabled Persons [ATDP] scale (Yuker, Block, & Young, 1966). Other questions were designed to explore the municipal park and recreation directors' preconceptions of the employability and the ability of the disabled university graduate in recreation to fulfill the duties of an employed recreator. The data were analyzed using Chi Square, Friedman Statistic, Mann-Whitney U, and Kruskal-Wallis. Based on the findings, a conclusion was drawn with regard to municipal parks and recreation director's preconceptions toward the university recreation graduate with a disability in recreation as a potential employee in the southwest region of the United States.

Definitions and/or Explanations

For the purpose of clarification, the following definitions and/or explanations of terms are presented for use in this study.

Attitudes Toward Disabled Persons Scale

"Positive-negative scaled measure of attitudes toward the disabled" (Yuker et al., 1966, p.2). Reliability of

the instrument was measured at .83. Item validity was not reported in the literature.

Disabled

"Structurally, physiologically, or psychologically different from the normal person because of accident, disease, or developmental problems" (Goldenson, 1978, p. 12).

Employment

"The act of hiring the services of someone or something in an occupation, work, or activity" (Random House Dictionary, 1978, p. 295).

Southwest Region

The southwest region includes the states of Arkansas, Oklahoma, Texas, New Mexico, and Louisiana as identified by the National Recreation and Park Association (NRPA).

Hypotheses of the Study

The following hypotheses were tested at the .05 level of significance:

1. There are no significant differences among directors' preferences for nondisabled, deaf, or

wheelchairbound applicants for the position of secretary.

2. There are no significant differences among directors' preferences for nondisabled, deaf, or wheelchairbound applicants for the position of lifeguard.

3. There are no significant differences among directors' preferences for nondisabled, deaf, or wheelchairbound applicants for the position of recreation leader for the general public.

4. There are no significant differences among directors' preferences for nondisabled, deaf, or wheelchairbound applicants for the position of recreation leader for special populations.

5. There are no significant differences among directors' preferences for nondisabled, deaf, or wheelchairbound applicants for the position of recreation facility attendant.

6. There are no significant differences among directors' preferences for nondisabled, deaf, or wheelchairbound applicants for the position of recreation supervisor.

7. There are no significant differences among directors' preferences for nondisabled, deaf, or

wheelchairbound applicants for the position of program director.

8. There are no significant differences among directors' preferences for nondisabled, deaf, or wheelchairbound applicants for the position of special populations coordinator.

9. There are no significant differences among directors' preferences for nondisabled, deaf, or wheelchairbound applicants for the position of recreation superintendent.

10. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to demonstrate use of recreational equipment.

11. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to teach a recreational activity to a group.

12. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to teach a recreational activity to an individual.

13. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to explain recreational activity techniques and methods.

14. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to demonstrate recreational activity techniques and methods.

15. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to observe students and correct mistakes.

16. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to maintain and/or repair recreational equipment.

17. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to purchase and/or sell recreational equipment.

18. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to coordinate work

schedules of personnel.

19. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to plan and develop a recreation program.

20. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to promote the recreation program.

21. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to document and complete paperwork in an activity program.

22. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound persons' ability to train staff.

23. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound persons' ability to evaluate staff.

24. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound persons' ability to interpret services to the public and participants.

25. There is no significant difference between the ATDP scores of female and male directors.

26. There are no significant differences between the ATDP scores of directors' in relationship to age.

27. There are no significant differences among the ATDP scores of directors when related to educational achievement.

28. There are no significant differences among the ATDP scores of directors when related to various types of experiences with disabled persons.

Limitations

The study was subject to the following limitations: (a) the 262 municipal parks and recreation directors in the NRPA southwest region, (b) the degree to which the participants completed the questionnaire, and (c) the degree of agreement amongst the experts.

CHAPTER II

REVIEW OF LITERATURE

The contents of this review include those aspects of the literature which were found to have a significant relationship to this study of municipal park and recreation directors' preconceptions of university recreation graduates with disabilities as potential employees. The review of related literature in this chapter is organized chronologically under the following center headings: (a) Employers' Attitudes Toward Hiring Disabled Employees, (b) Employment Opportunities and Occupational Stereotypes in Relation to the Disabled Persons, and (c) Attitudes Toward Disabled Persons.

Employers' Attitudes Toward Hiring Disabled Employees

Schletzer, Darvis, England, and Lofquiest (1961) investigated the attitudes of personnel managers and supervisors toward hiring physically disabled workers. A survey was mailed to over 1,300 personnel managers and supervisors in private industry throughout the United States. The total number of usable returns was 900.

Whereas attitudes seemed generally favorable, some specific negative attitudes were identified which were related to the hiring of disabled persons. These attitudes were expressed in relationship to health and good appearance, flexibility in job duties, limitations of the handicapped person's abilities and training potential, and other similiar sentiments.

Most of those surveyed stated that they would not hire anyone who failed the company physical examination. It was also reported that the medical departments "screened out" those with physical disabilities from the potential employees.

Almost all of those surveyed rejected the idea of regulations and laws requiring the hiring of qualified disabled workers. These same persons also recognized the problem of unemployment among handicapped persons.

The results of the study indicated that the education of personnel managers and supervisors in private industry concerning the capabilities of disabled workers had not increased the rate of employment among the handicapped. The investigators recommended that the job requirements of each individual company be analyzed in order to determine the barriers that existed. They also recommended that the

existing barriers should be minimized to pave the way for actual employment of handicapped workers.

Emenu and McHargue (1978) investigated employer attitudes toward the employment and placement of handicapped persons. The investigators also surveyed employers' expectations for vocational rehabilitation placement, counselor follow-up, and the types of information desired by the employer prior to hiring disabled applicants. Various types of businesses located in rural, small towns, and metropolitan areas in Florida were chosen for the study. A four-part Employer Attitudes Survey Questionnaire (EASQ) was given to 57 employers.

The EASQ was developed specifically for this study. A pilot study was conducted and the results were similar to those found during the study. The EASQ was designed to obtain demographic information related to each of the surveyed businesses and employers, the employers' knowledge of vocational rehabilitation, the employers' experiences with disabled employees, and disabled persons in general. The EASQ also measured the employers' attitudes toward the employment of handicapped individuals and toward vocational rehabilitation. The investigators assessed employers' opinions about the types of

information necessary to the employer when placing a disabled applicant.

The results of the study indicated that the attitudes of the employers from large businesses were not significantly different from those of the small business employers. Approximately 40% of the subjects had knowledge of vocational rehabilitation. Many employers did not know what the effect of hiring disabled employees would be on their insurance rates; however, the employers reported that 10% of persons hired during the past year were disabled. Employers indicated an overall preference for hiring disabled applicants and support for vocational rehabilitation programs. Many indicated that they wanted to be able to interview disabled applicants prior to hiring them and wanted to be contacted by that individual's rehabilitation counselor.

The investigators suggested the need for follow-up research. It was recommended that the study be duplicated using mail-out questionnaires in order to obtain a larger sample. Another suggestion was to investigate the relationship between the employers' responses to the questionnaire and their actual hiring practices.

Florian (1978) studied Israeli employers' attitudes

toward hiring people with different types of disabilities. The 262 participants were randomly selected from the National Insurance Institute List of Employers. Employers from the private, public, and governmental sectors in Northern Israel were represented in the study. A questionnaire containing 60 items was used as the research instrument during the summer of 1973. The data were collected using the personal interview method.

The results of the study indicated that most employers would hire disabled workers. Less than one-fourth of the respondents declared that they would not hire a disabled applicant. A chi square analysis of the data indicated a positive relationship between past experiences with handicapped workers and the employer's readiness to employ the disabled. This positive relationship also existed for those employers who expressed dissatisfaction with disabled workers on their staffs. Employers claimed that the disabled worker was absent more often, worked slower, was less productive, and less prompt with assignments than their nondisabled peers. The most frequently expressed preference for a particular disability was for war-related and job-related injuries, especially if the injury was manifested as an amputation

or face disfigurement. The least likely to be employed were epileptic, mentally ill, and blind individuals.

Florian concluded that more disabled individuals should be referred by rehabilitation counselors to employers to increase the employers' level of awareness and exposure to the disabled. Finally, the author suggested that a clear legal framework must be developed to insure the rights and obligations of employers with regard to their disabled workers.

Seifert (1979) investigated attitudes of working people toward disabled persons, especially in regard to vocational rehabilitation. A total of 1,879 apprentices, blue and white-collar workers, and supervisors from 33 firms in Germany were surveyed.

The questionnaire, developed by the researcher, comprised the following measures: (a) statements concerning the behavior of non-disabled persons toward disabled individuals, (b) questions requiring a specific answer and questions requesting opinions, (c) a distance scale, and (d) a checklist of adjectives. The results of the study indicated that the workers' knowledge/information about disabilities were limited. The majority of the workers viewed physically disabled

persons as being different from the normal population. Adjectives used in describing physically disabled persons included permanent suffering, helplessness, emotionally disturbed, lonely, and socially isolated. Most of the nondisabled subjects believed that the disabled person was somehow responsible for his/her own disability. The subjects also tended to be either disgusted by the disabled or tended to pity them. The workers advocated for partial or complete segregation of disabled employees and stated that they believed that employers preferred nondisabled employees. The subjects also indicated that mentally retarded persons were least desirable as fellow-workers and identified amputees as the most desirable.

The results of this study showed that negative and discriminatory attitudes toward disabled persons were widespread among working people. The resistance toward complete vocational, social rehabilitation, and integration of disabled persons was presented by the investigator as major problems to be eliminated.

Florian (1981) studied employers' objections to hiring disabled persons. The sample consisted of 223 employers in the private and public sectors in the

northern region of Israel. Each employer was interviewed about his attitudes concerning the possible risks involved in employing disabled persons. The relationship between architectural and technical barriers and employment of disabled workers, as well as the extent to which the employer was familiar with the legislation requiring the employment of disabled war veterans were also investigated.

The interviews were conducted by 10 students from Haifa University. The administration of the questionnaire took approximately one half hour.

The results of the study showed a significant correlation between knowledge of the law mandating employment of disabled war veterans and compliance with the law. Approximately 30% of those employers unaware of the legislation employed disabled persons anyway; however, a large number of employers (44%) did not employ disabled individuals despite their awareness of the law. The results also indicated that there was a high correlation between barrier-free work environments and employers' readiness to hire disabled employees. However, those employers who were working in inaccessible buildings insisted that even if structural changes were made, it

would be impossible to hire disabled persons. Economic criteria were not among the major reasons for employers' resistance to employing disabled persons.

Florian concluded that legislation alone does not insure the employment of disabled workers. The researcher recommended that employers be provided with complete information on the true potential of the disabled worker, appropriate vocational training for disabled persons, and demonstrations of the practical conditions under which successful employment is possible.

Seigfried and Toner (1981) investigated the attitudes of college students (96 males and 96 females) toward potential handicapped co-workers and supervisors. The surveys were randomly distributed to students in introductory psychology classes. The focus of the questionnaire was to determine the influence of a handicapped condition on the choice of potential colleagues in a new job.

The investigators examined the interrelationships of sex of the subject, job status of the potential colleague, sex of the potential colleague, and the handicap of the potential colleague. Participants were asked to imagine that they had been offered a job and that their supervisor

(for half of the sample) or their co-worker (for the other half of the sample) was described in the following terms: individual interests and experience, and handicapped status which was manipulated by stating that the person had been in an automobile accident either 2 years prior or as a young child. All references to the accident were deleted for the nonhandicapped potential supervisor/co-worker. The questionnaire contained 16 rating scales chosen to reflect common interpersonal exchanges on the job, overall job performance, and other items dealing with stereotypes held about handicapped persons. Multivariate and univariate analyses of variance were performed on the data.

The results of the study indicated that the nonhandicapped person was perceived as being less willing to communicate with co-workers than the disabled person. The disabled individual would be approached more often to discuss personal problems of co-workers and be asked favors more often than the nonhandicapped person. The nonhandicapped person was expected to be more likely to upset co-workers than the recently disabled individual. The nonhandicapped person was also viewed as less likely to need special attention than the disabled persons.

Females gave significantly higher ratings to the disabled persons, especially the disabled females, than male subjects. No clear interpretations could be made concerning rate of expected absenteeism or problems related to travel.

The investigators concluded that physical disability was not a factor in judging professional competence, ability to successfully perform the job, or in being a colleague with whom others would be willing to work with. The authors concluded that the responses might not be valid indicators of actual attitudes or as indicators of behavior. The relationship of expressed attitudes and actual behavior in the work environment had not as yet been demonstrated.

Employment Opportunities and Occupational Stereotypes in
Relation to the Disabled

Chandler (1960) studied the employment opportunities for the handicapped in Denton, Texas. Businesses which employed more than 10 individuals were included in the study; a total of 65 employers were interviewed. A questionnaire and personal interview were the devices employed in the collection of the data. The investigator sought information concerning the number of handicapped workers, the types of disabilities, and the current

attitudes of the employers toward the disabled workers. The first part of the questionnaire provided general information about the participating businesses; the second portion was constructed to allow the investigator to gather information about handicapped workers. The last part was designed to record the employer's attitudes toward the employment of the handicapped. The method utilized to assess attitudes was not cited.

Examination of the survey results showed that only 1.6% of all employees were handicapped. The highest percentage of the disabled workers were found in transportation, communication, and other public utilities. Businesses dealing in finance, insurance, and real estate did not employ any disabled persons. The survey results indicated that a majority of the employers would not hire handicapped workers. Those employed possessed the following types of disabilities: visual and hearing impairments, cardiac problems, orthopedic impairments, and epilepsy. Employers who were willing to hire the handicapped indicated that they would be selective on the basis of the severity of the handicap, the type of job sought, the applicant's ability to use both hands, and if the disabled applicant would interfere with the other

workers' productivity.

Chandler concluded that the employers who were unwilling to hire handicapped employees felt that they had no suitable jobs for disabled persons. These employers also felt that handicapped employees were more trouble and more expensive than able-bodied employees. Chandler recommended that emphasis be placed on eradicating the existing negative stereotypical attitudes held by employers toward the disabled in Denton.

Phillips (1975) surveyed employers concerning their attitudes concerning employment opportunities for deaf people. The interview method was used in surveying 34 firms selected from Rochester and Monroe counties in New York State. The firms included in the study employed between 50 and 200 persons. Most of the individuals interviewed were employment personnel and industrial relations people.

The purpose of the interviews was to identify the attitudes of employers relative to hiring and placing deaf individuals, identify attitudes and opinions of employers regarding the extent to which hearing impairments influence work and work productivity, and to determine the procedures that employers used in the orientation of deaf

individuals to the job. No specific set of questions was used during the interview. A range of attitudes were sought rather than the quantification of specific attitudes.

The responses to the interview indicated that communication on the job was a major factor in restricting deaf personnel from specific occupations. Employers tended to react categorically against the employment of deaf persons in jobs that necessitated phone usage and jobs which required the taking and giving of special orders, or accurate communication. Communication problems with co-workers tended to be the basic reason for the lack of promotion of deaf individuals to supervisory or managerial positions. Attitudes toward hiring the deaf included those willing to hire, those opposed to hiring and those who hadn't thought about hiring deaf employees. Some employers expressed a lack of knowledge concerning possible hazards involved or union policy problems resulting from the employment of deaf personnel. Employers appeared to be favorable toward the placement of deaf individuals in jobs which were routine, repetitious, and required little explanation or communication. Orientation for deaf persons was viewed as being

inadequate. Employers were uniformly against hiring deaf workers in hazardous occupations. Occupations viewed as appropriate for the deaf were those of key punch operating, drafting, and printing.

Phillips concluded that employers needed to know about the services available to them when hiring a deaf individual, such as the provision of a free interpreter. Phillips suggested that educators of the deaf and community service organizations develop activities to help employers of deaf persons become more aware of these special services. Phillips also pointed out that many jobs are needlessly restricted from deaf individuals because of training and orientation problems. Information programs and seminars should be developed to provide potential employers of deaf persons with accurate information regarding unions, insurance, state laws, and other policies that might be significant in the employment of deaf persons.

Phillips (1975) surveyed employers to identify specific jobs for deaf workers. A questionnaire was sent to 128 industries and businesses, 125 professional and trade associations, and 26 institutions of higher education having specific programs for deaf persons in the

state of New York. Phillips focused on identifying occupations open to the totally deaf or extremely hard-of-hearing individuals instead of including occupations that may be filled by persons with varying degrees of deafness.

As the questionnaires were returned, each position identified was paired with the corresponding job listed in the Dictionary of Occupational Titles published by the U.S. Department of Labor. The jobs were categorized into nine sections: professional, technical and managerial; service; farming, fishing, and forestry; processing; machine trades; bench work; structural work; and miscellaneous. From the survey sources, 515 specific and distinct career opportunities for the deaf were identified. The overall highest percentage of jobs was in the machine trades category. It is significant to note that 57.8% of the jobs identified as appropriate for deaf employees were related to their handling of objects, 33.3% of the jobs were related to data, 3.9% were related to people, and 5% were not categorized.

Phillips concluded that varied career opportunities for the deaf existed. The opportunities were somewhat limited because of communication skills impaired by

auditory dysfunctions. The author suggested that deaf persons be provided with adequate information about all jobs in all of the categories and be given the opportunity to consider such career possibilities in view of their own communication capabilities.

Dodd (1977) studied the stereotypical viewpoints of deaf students toward job appropriateness in relationship to sex and deafness. The subjects were deaf and had a minimum of an eighth grade education. There were 115 females and 182 males between the ages of 17 and 45 involved in the study. The subjects were asked to indicate whether an occupation was appropriate considering the sex and deafness of the worker. The job list test consisted of 40 occupations which were legally open to both sexes. Each occupation listed was filled by at least one deaf worker. Scores were derived by the accumulation of one point for every response that specified one sex or the other, or specified hearing worker only. These scores were treated as separate dependent variables. Any questionnaires that were returned incomplete were eliminated from the analysis.

The results of the survey showed that 23 of the students did not base job appropriateness on sex. There

were nine students who did not base job appropriateness on deafness. Males were found to restrict job opportunities more often than the females. Older deaf students tended to specify more jobs as inappropriate for deaf workers than the younger students. The correlation between sex and deafness showed that those students who rated occupations as specific to only one sex also tended to rate jobs as inappropriate for deaf workers.

The investigator stated that the results of this study indicated a need to address the limited attitudes of freshman deaf students. Students involved in choosing a profession ought to be liberated from the limited views associated with stereotypical attitudes. Dodd suggested that intervention with revised career planning might be utilized to address the issue of stereotyped attitudes.

Robinson and Zytowski (1977) studied the extent to which a vocational counselor may introduce bias into the occupational choices of hypothetical clients. The publishers of the Kuder Occupational Interest Survey (KOIS) solicited 600 participants from the users of their services within the United States. The American respondents were requested to review a KOIS profile and personal sketch; they were then instructed to check all of

the occupations which the counselor deemed appropriate for that hypothetical client.

The KOIS profile and personal sketch sought information related to vocational interest such as career aptitude, education, academic achievement, and leisure activities. The profiles and personal sketches differed only in name, age, race, and place of residence. The hypothetical clients were represented in 10 different profiles. These profiles were constructed to represent and indicate bias based on race, gender, geography of residence, and age. The questionnaire was scored for the number of occupations checked in each level, the number of adjectives from each personality type, and the total number of personality descriptions checked.

Regression analysis of variance was performed on the data to analyze the effects of the client variables of age, race, and location as compared to the counselor variables of age, race, and sex on the occupational choices made, personality types indicated, and the adjectives checked. The results indicated only slight differences on occupational expectations based on the variables. There were more personality differences attributed to the client on the basis of sex than any

other variable. The study also indicated that older counselors tended to be more cautious and ascribed fewer personality characteristics to the hypothetical client. Relatively few biases were revealed by this study.

Robinson and Zytowski suggested that the data may have been influenced by the artificial nature of the collection process. The researchers concluded that the transmitting of the KOIS results to the client was relatively uniform regardless of race, gender, age, and geographical residence of either the client or the counselor.

Roualt (1978) collected statistics on handicapped persons and their employment in the European countries of Belgium, Denmark, the Federal Republic of Germany, France, Ireland, Italy, Luxemburg, the Netherlands, and the United Kingdom. Roualt contacted the ministries and many public, semi-private, and private services and organizations involved in the education, training, and placing of physically or mentally disabled persons in each country. Handicapped populations included everything from myopia and cardiac problems to physical and mental impairments.

The data were categorized according to disability, age groupings, sex, mode of disability acquirement, and by

the specific centers and organizations which serve handicapped persons by country. The investigator also reported the legislation from each country related to the employment of the handicapped.

The survey indicated that the lowest percentage of handicapped individuals in comparison to the general population was in Italy with only 1.02% being disabled. The highest percentage of handicapped individuals was found in the Netherlands with 8.7% of the population being disabled. The statistics showed that disabled male persons were employed at least twice as often as disabled female persons. The highest percentage of employed disabled individuals was found in Belgium where 49.7% of the disabled males were reported to be employed.

The investigation identified various ministerial departments and public or semi-public services that recorded statistical information specific to the fields with which they were concerned in reference to persons with disabilities. Lack of information and dialogue between the various organizations made it impossible to obtain more precise details. Roualt suggested that these services could be arranged fairly easily to cooperate in centralizing information from all sectors.

Lonnquist (1979) investigated the unemployment rates among disabled and nondisabled graduates and dropouts who attended the University of Missouri at Columbia (UM-C) between 1960 and 1977. From an identified 268 severely physically disabled former students, 223 responded to the mailed questionnaire and formed the disabled sample. A control group of 290 responding nondisabled former students was matched with the disabled population.

The investigator, utilizing a questionnaire, solicited information concerning disability (if applicable), education at UM-C and other colleges and universities, employment and financial status, and the dates when the subjects last searched for employment. Frequency distributions were determined from the specified variables. Chi Square and Kendall Tau were used to analyze the relationship between the variables.

The results of the study indicated that the unemployment rate of disabled students receiving a bachelors degree was significantly lower than the unemployment rate of disabled dropouts. Overall, the unemployment rate of the disabled sample was significantly higher than the comparison group of nondisabled former students. The disabled dropout's average income was

significantly lower than the average income of the nondisabled dropout's average income. The data obtained in the study also indicated that disabled respondents had a higher unemployment rate than the nondisabled respondents.

The researchers concluded that the lower unemployment rate among disabled graduates indicated that higher education attainment is a definite advantage in securing employment for severely impaired individuals. The researchers also recommended that efforts be continued to resolve the problem of unemployment among the disabled population.

Calik (1980) studied the acceptance of vocation and visual disability in blind and partially sighted individuals. The subjects, ages 16-25, were students from the Music School for Visually Handicapped Children in Prague, Czechoslovakia. Of the 50 subjects, 20 were either completely or almost totally blind; the remaining 30 subjects were partially sighted. Data were collected using the Inventory of Attitudes Toward Visual Disability (IAVD) (Fitting, 1954); the Inventory of Attitudes Toward the Profession (IAP) [instrument uncited in article]; rating scales for evaluating talent, interest, and

performance; and each subject's preprofessional music history.

The IAVD contained 30 items to be answered either yes or no. Each item described a particular behavior or experience of a visually impaired person. The IAP contained 31 items concerning the student's relationship to music, training, to teaching music, and to future employment. The inventory of interests assessed activity preferences, self-concept of one's own talent, and preference of school subjects. The rating scales were prepared by the instructors in reference to diligence, musical talent, interest in course work, and performance. Childhood dreams of profession, average daily practice time, neurotic symptoms, and other vital information were assessed. The statistics to employed to analyze the data were the Chi Square and Spearman Rho.

The results failed to indicate any relationship between the attitudes toward visual disability scores and vocational attitudes scores. The only relationships indicated were between the scores concerning the acceptance of the disability and the original dreams of a profession, and the present diligence toward music. The acceptance of the profession was more favorable if the

original dream was in the music profession. The vocational acceptance was related to the type of education the subject had and whether it was an integrated or segregated school. Students who had an additional defect like epilepsy, cardiac problems, hearing defects, etc., showed greater tendency for wanting social recognition through music.

In interpreting the results, Calik reconsidered the contents of the IAVD and reviewed the importance of accepting the profession of music instructor by the blind subjects. The researcher concluded that the items of the inventory appeared to have investigated independence of blind individuals rather than acceptance of the disability. The factor was not readily correlated with the music profession. Calik suggested that the acceptance of the visual disability needed more detailed research.

Zadny (1980) studied the reactions of employers to job development and disabled employees. Interviews were conducted with 448 Portland and San Francisco employers. An introductory letter was sent to the person responsible for hiring at each firm. The interview was conducted 1 week following the initial contact.

The interviews followed a well-rehearsed script that

explained the purpose of the survey, noted that participation was voluntary, and set forth the wording of each question. Zadny included the following questions in the interview:

1. How many times had the company been approached over the past year by agencies seeking jobs for the disadvantaged and handicapped persons?
2. What were the respondents' reactions to the overture?
3. Had the firm employed any disabled persons in the past year? If so, how many?
4. How do you rate the disabled employee's work performance?
5. Would the agency hire a disabled person who was more qualified than the other applicants? Just as qualified? Less qualified?

The results of the survey indicated that government agencies concentrated mainly on contacting the large companies to inquire about job opportunities for the disabled. Respondents described their reactions to those inquiries as positive. The replies indicated that employers possessed positive attitudes toward job development for the disabled. Large companies tended to

hire more disabled persons than the smaller firms during the past year before the study. Over half of the respondents had hired a disabled employee and had rated that employee's performance as average or better. The responses concerning the hiring of qualified disabled were favorable. A little more than one third of the respondents indicated that they would hire an equally qualified disabled individual before hiring other applicants. Less than 6% of the employers would hire an unqualified disabled applicant.

Government agencies serving the disabled and disadvantaged through their contacts appeared to promote increased hiring of disabled persons. Respondents indicated that their firms were prepared to hire disabled workers only to the extent that they were at least as qualified as other applicants. Zadny recommended that more surveys of this nature be conducted in the future.

Schein, Delk, and Hooker (1980) examined barriers to the full employment of deaf persons in the federal government. Entrance procedures and requirements for Civil Service positions were reviewed to identify those procedures which hinder the employment of deaf persons. Job requirements were examined to determine if specific

duties existed that could be altered to accommodate deaf personnel. Deaf workers and their supervisors were interviewed to identify problems encountered in the job and to obtain their suggestions for improvement of both work productivity and job satisfaction among deaf employees. Promotion patterns were also examined for possible barriers to deaf workers. The federal agencies investigated were the Social Service Administration (SSA) in Baltimore and the Navy Printing Office (NPO) at the Pentagon.

The SSA employed approximately 26,000 persons; 4 of the employees were deaf. The NPO employed 400 persons, 5 of whom were deaf. The investigators found that the entrance procedures included a written exam. A deaf individual who may be capable of performing on the job may have limited English language skill thus affecting test performance. Interviews were also conducted with all potential employees; these interviews presented a barrier to the deaf person having limited facility having oral or written English. Analyses of job descriptions revealed that both agencies could reclassify jobs, with or without modification according to suitability for deaf persons. with/ or without modifications. Of 119 positions in both

of the agencies, 44 appeared to be suitable for deaf applicants with limited communication skills, 11 appeared to be suitable for deaf persons with good communication skills, 37 jobs needed some form of modification in order to be performed by deaf personnel, and 27 positions were deemed inappropriate for deaf personnel even with modifications.

Deafness was not judged by most of those interviewed as a factor detrimental to promotion. Supervisors identified three types of job barriers faced by the deaf workers: use of sound-recording equipment; use of machinery; and agency positions requiring contact with the general public.

The researchers recommended that inservice opportunities for Civil Service continue to be more accessible to deaf workers. Of the 119 jobs reviewed, only 22% were found totally unsuitable for deaf workers; the other positions should be made available to deaf applicants. It was stated that deaf workers need greater exposure to career orientations as well as job orientations in a given agency. The investigator concluded that the federal government should implement a program to orientate supervisors to deafness. Schein et al. also

advocated the installation of teleprinters, inclusion of classes in manual communication for co-workers, and the provision of sign interpreters in agencies which employ deaf persons.

Moccia (1981) investigated the attitudes of 73 high school students with respect to sex and deafness stereotypes. The study was conducted at the Arizona School for the Deaf and Blind (ASDB). Thirty-four of the subjects were male and 39 were female. Almost 70% of the sample was deaf; the remaining 30% was hard-of-hearing. The survey instrument, developed by the investigator, was administered by the high school homeroom teachers at the ASDB over a 3-day period.

The researcher requested demographic information concerning the degree of hearing loss, onset of impairment, and the hearing status of parents and siblings. The respondents were also asked to consider 27 jobs from three prospectives as stated by Moccia:

1. Is each job suitable for a man, woman, or both?
2. Is each job suitable for a hearing person, deaf person, or both?
3. Do you know a deaf woman, a deaf man, or both who are working at a job?

The job list presented a varied sample of occupations in terms of both sex and deafness. Jobs with a high score were less dependent on the stereotype (sex or deafness) and those with a low score were viewed more as typically based on sex or hearing.

The results of the survey indicated the least stereotypical occupations based on sex were those of school counselor, dorm supervisor, and school bus driver. The occupations that were viewed as the most stereotypical based on sex were those of nurse, carpenter, and auto mechanic. Occupations that were viewed as not dependent on hearing included cook, dorm supervisor, and auto mechanic. The jobs that were viewed as for hearing only were doctor, cashier, and lawyer.

Moccia concluded that those respondents who were stereotyped by sex tended to see hearing impairment also as a restriction for job possibilities. The outcome of stereotyping by sex and by deafness was that deaf individuals were overrepresented in some occupations and underrepresented in others. Moccia suggested that solid information about the variety of jobs as well as actual skill training be presented to deaf persons so that they would be equipped to make realistic career decisions and

that vocational planning be based on a well-informed choice.

Attitudes Toward Disabled Persons

Yuker, Block, and Young (1959) developed an attitudes toward disabled persons scale. The investigation was sponsored by the research staff at the Human Resource Center in New York. The scale was intended to be one that could be used with both disabled and non-disabled persons, it was designed to be relatively short and easy to administer, score, and interpret.

Three forms of the Attitude Toward Disabled Persons Scale (ATDP) were developed. The original, ATDP-O, and the two later forms, ATDP-A and ATDP-B, took approximately 10-15 minutes to administer. The interpretation of the scores was presumed to reflect perceived differences between disabled and non-disabled persons. A high score indicated that the disabled individual was viewed in a similar manner to the non-disabled person and a low score reflected the opposite.

Many studies have been conducted which sought to determine reliability of the ATDP (Eisler, 1964; Siller, 1964; Swingle, 1962). These studies indicated that the scales have average reliability. While each of the forms

had average reliability, the correlation between the forms tended to be low.

The relationship between the ATDP scores and variables such as sex, age, educational background, and race have also been explored in detail (Siller & Chipman, 1964; Smith, 1978). Although there were no conclusive results, broad assumptions were drawn. For instance, females tended to score higher than males. There were no differences in the scores in relationship to age or marital status. There were differences in the ATDP scores in relation to education and sex.

The Human Resource Center sponsored a large number of studies which sought to determine the relationship of ATDP scores to personality variables (Siller, 1964; Smith, 1978). Low ATDP scores were found to be related to hostility and aggression. Self-concept and IQ were also correlated with the ATDP score. Other studies (Chesler, 1965; Yaker, Block, & Cambell, 1960) found that the closer the social and personal contact one had with disabled persons, the greater the acceptance of disabled persons in general.

The ATDP scale has been used in studies (Eisler, 1962; Smith, 1978) to determine attitudes toward disabled

persons. The instrument has been under continual investigation and revision since its publication in the early fifties.

Siller and Chipman (1964) examined the psychometric nature of the Attitudes Toward Disabled Persons Scale and the need for a more adequate instrument. The ATDP was administered to 235 junior high school students, 245 high school students, 553 college students, and 75 adult females. The study was conducted in New York City with the sample being almost entirely caucasian and middle class.

The factorial analysis was conducted only for the 245 high school students, 298 of the college students, and the adult group. The variables reviewed were the ATDP score, each of the 20 items, age, sex, and amount of experience the subject had with handicapped persons. Pearson Product Moment correlations were computed between the ATDP and two instruments developed by Siller and Chipman; the Feeling Check List (FCL), and the Social Distance Scale (SDS).

The results of the ATDP data indicated that there were only trivial relationships between sex or age and the ATDP score. The data also revealed only trivial relationships between experience with disabled persons and

the ATDP score. A reliability estimate of .84 was determined based on the data. Item analysis indicated that one item ought to be scored differently than the instructions indicated. An interpretation of the results indicated that further modification of the ATDP was needed, although reliability and comparability over age and educational levels were acceptable.

The researchers concluded that attitudes toward the disabled were multi-dimensional; measurable; and a function of type and severity of the disability, specific experiences with handicapped persons, and the individual's personal set of values and beliefs. A single attitude score toward the disabled, in the opinion of the investigators, tended to obscure real experimental effects.

Antonak (1980) investigated item characteristics, scale reliability, and factorial structure of the ATDP-O. The data for this investigation were obtained from 326 individuals (263 females and 63 males) enrolled at the University of New Hampshire. The mean age of the sample was 25.81 years. Antonak researched the ATDP-O to test the instrument on its reliability in measuring attitudes toward disabled persons as a group.

The statistical analyses included a mean and a standard deviation for each of the 20 items contained on the instrument. Each item was dichotomously scored by collapsing the Likert scale into either positive attitudes toward disabled persons or negative attitudes toward disabled persons. The responses were then subjected to item analysis procedures.

The results of the study indicated that sex, age, educational level, professional specialization, and frequency of contact with disabled persons were not significantly related to ATDP-O scores. Intensity of contact with disabled individuals was the best predictor of attitude scores, yet it only accounted for 4% of the variance. Item analysis results indicated five of the items failed to discriminate adequately between individuals with high and low ATDP-O scores.

Antonak contended that the ATDP-O warrants modification of certain items. Detailed psychometric analyses would be required to demonstrate that the weaknesses of the ATDP-O discovered in this study would be satisfactorily corrected if the questionable items were reworded. The results of this investigation do not support the continued use of ATDP-O in its present form.

Although this conclusion only applies to Form O; Form A and Form B must be questioned because Form O was used for construct validation in both cases.

CHAPTER III

PROCEDURES OF THE STUDY

The present study was designed to determine the preconceptions of municipal park and recreation directors' in the Southwest region of the United States concerning the potential employment of university recreation graduates with a disability. The procedures used in the development of this study are described in this chapter under the following headings: (a) Preliminary Procedures; (b) Development of the Instrument; (c) Selection of the Subjects; (d) Collection of the Data; and (e) Treatment of the Data.

Preliminary Procedures

The investigator surveyed, studied, and assimilated pertinent information from all available documentary resources. A tentative outline was developed and presented to the members of the thesis committee. Suggestions made by the members of the thesis committee were incorporated into the revision of the outline. The revised outline was approved and filed in the form of a Prospectus in the Office of the Provost of the Graduate School at Texas Woman's University.

Development of the Instrument

The investigator identified and reviewed all available instruments that met the objectives of the study. The evaluative criteria established for the instrument were to identify attitudes toward disabled individuals and to identify a selected number of recreation jobs and associated duties, as defined by the Dictionary of Occupational Titles (U.S. Department of Labor, 1980), that employers view as possible for disabled persons to fulfill. The investigator selected the Attitudes Toward Disabled Persons Scale-Form B developed by Yuker, Block, and Young.

The review of the available instruments revealed that there was no instrument that met all of the criteria developed for the study and which would provide the desired data. Therefore, the investigator developed a questionnaire to accompany the use of the ATDP Scale. A pilot study was conducted with 10 North Texas Recreation Center Supervisors from Dallas, Fort Worth, Denton, Arlington, Plano, Lewisville, and Richardson. Based on the results of the pilot study, additional revisions were made under the direction of the chairman of the thesis committee.

An advisory committee selected with the assistance of the thesis committee, were asked to review the instrument in relation to the questionnaire's effectiveness in collecting the pertinent information. All of the advisory committee members were either recreation practitioners or recreation educators. Based on the comments and recommendations of the nine responding experts, further revisions and alterations were made.

Selection of the Subjects

Selection of the subjects for this study were based upon the following criteria: (a) must have the title and/or job responsibilities of a municipal park and recreation director and (b) must be employed in the Southwest region of the United States.

During the spring semester of 1981, names and addresses of park and recreation directors were obtained from the presidents of the state recreation organizations in Texas, Oklahoma, Louisiana, New Mexico, and Arkansas. All directors identified were asked to participate in the study.

Collection of the Data

The revised instrument was printed and mailed along with a self-addressed stamped envelope on April 25, 1982

to 262 municipal park and recreation directors. A deadline of May 20, 1982 was incorporated in the cover letter. Follow-up postcards were mailed a week later to all subjects. A total of 12 questionnaires were returned undeliverable. Completed questionnaires were received from 130 directors; this constituted a return of 52.4%.

Treatment of the Data

The data collected during the study were compiled and organized into descriptive tables which are presented in Chapter IV. The statistical techniques used were Chi Square, the Friedman two-way analysis for rank data, Mann-Whitney U, and Kruskal-Wallis.

The findings of the study are presented and discussed in Chapter IV. Chapter V contains a summary of the study, a conclusion, and recommendations for future studies.

CHAPTER IV

PRESENTATION OF THE DATA

The purpose of this investigation was to determine the preconceptions of municipal park and recreation directors toward employing disabled individuals. The problem was to determine if university recreation graduates with a disability would be considered for employment by park and recreation directors in the Southwest region of the United States. Attitudes toward disabled persons, and specific jobs and job duties were studied. Data were gathered from municipal park and recreation directors during the 1981-1982 academic year.

The questionnaire was mailed to 262 municipal park and recreation directors. Of the initial 262 directors to whom questionnaires were sent, responses were received from 130 directors; 12 others were returned which were not usable. This constituted a 52.4% rate of return. The findings are presented under the following headings: Description of the Subjects and Analysis of the Data.

Description of the Subjects

A total of 130 municipal park and recreation directors participated in this investigation. The subjects are described in tables 1 through 6 according to sex, age, educational attainment, degree, previous experience with disabled persons, and whether they had ever interviewed a disabled person for a position.

Table 1 contains information regarding the sex of the respondents. There were more male municipal park and

Table 1

Description of the Subjects
by Sex

| Categories | Number | Percentage |
|-------------|--------|------------|
| Female | 17 | 13.1 |
| Male | 93 | 71.5 |
| No Response | 20 | 15.4 |
| Total | 130 | 100.0 |

recreation directors than female municipal park and recreation directors. Of the 110 persons responding to this question, 17 (13.1%) were female and 93 (71.5%) were male.

Table 2 contains information regarding the age range of the respondents. The largest percentage (46.2%) of

Table 2
Description of the Subjects
by Age

| Age Categories | Number | Percentage |
|----------------|--------|------------|
| Under 22 | 0 | 0.0 |
| 22-30 | 23 | 17.7 |
| 31-39 | 60 | 46.2 |
| 40-48 | 23 | 17.7 |
| 49-57 | 16 | 12.3 |
| 58 and over | 6 | 4.6 |
| No Response | 2 | 1.5 |
| Total | 130 | 100.0 |

the respondents were in the 31-39 age category. Of the 128 persons responding, 23 (17.7%) were between 22-30 years of age, 60 (46.2%) were between 31-39 years of age, 23 (17.7%) were between 40-48 years of age, 16 (12.3%) were between 49-57 years, and 6 (4.6%) were over 58 years of age.

The directors were asked to indicate the highest educational degree attained. Responses to this question are presented in Table 3. The level of education attained ranged from completing high school to the earning of the doctorate. Of the 128 persons responding to this question, 8 (6.1%) had completed high school, 23 (17.7%) had attended college, 62 (47.7%) had earned a bachelors degree, 34 (26.2%) had earned a masters degree, and 1 (0.8%) had earned a doctorate.

Table 3

Highest Educational Level Attained by Directors

| ----- | | |
|-------------------|--------|------------|
| Educational Level | Number | Percentage |
| ----- | | |
| High School | 8 | 6.1 |
| Some College | 23 | 17.7 |
| Bachelors | 62 | 47.7 |
| Masters | 34 | 26.2 |
| Doctorate | 1 | 0.8 |
| Certificate | 0 | 0.0 |
| No Response | 2 | 1.5 |
| Total | 130 | 100.0 |
| ----- | | |

The directors earning a bachelors degree, masters degree, or doctorate were asked to indicate whether their degree was in recreation. Responses to this question are presented in Table 4. Of the 96 respondents earning a

Table 4
Description of the Subjects
by Degree

| Degrees | Number | Percentage |
|-------------------|--------|------------|
| Recreation Degree | 53 | 55.2 |
| Other Degree | 43 | 44.8 |
| Total | 96 | 100.0 |

Note. Only those directors earning a bachelors degree, masters degree, or doctorate were included.

degree, 53 had earned a degree in recreation; 43 had earned a degree in other areas. A majority of the respondents (55.2%) earning a degree had earned at least one degree in recreation.

The directors were asked to indicate the type of previous experience they had, if any, with disabled persons. As shown in Table 5, 4 (3.1%) of the respondents

Table 5

Previous Experience with Disabled Persons

| Disabled Relationship | Number | Percentage |
|------------------------|--------|------------|
| Respondent Disabled | 4 | 3.1 |
| Family/Relative(s) | 29 | 22.3 |
| Friend(s) | 80 | 61.5 |
| Work Peer(s) | 25 | 19.2 |
| Employee(s) | 54 | 41.5 |
| Consumer(s) | 46 | 35.4 |
| Boss(es) | 4 | 3.1 |
| No Previous Experience | 24 | 18.5 |

Note. Respondents were able to mark more than one category on this question, therefore, the total percentage is greater than 100.

were disabled, 29 (22.3%) were related to a disabled person, 80 (61.5%) were friends with disabled individuals, 25 (19.2%) worked with disabled peers, 54 (41.5%) supervised disabled employees, 46 (35.4%) provided services for disabled consumers, and 4 (3.1%) worked for disabled bosses.

The number of directors who had interviewed disabled applicants is presented in Table 6. Of the 124 persons

Table 6

Disabled Applicant(s) Interviewed by Directors

| Groups | Number | Percentage |
|-------------|--------|------------|
| Yes | 59 | 45.4 |
| No | 65 | 50.0 |
| No Response | 6 | 4.6 |
| Total | 130 | 100.0 |

responding to this question, 59 (45.4%) directors had interviewed one or more disabled applicants. Sixty-five (50.0%) had never interviewed a disabled applicant.

Analysis of the Data

Analysis of the Data Relative to Specific Jobs

The directors were asked to rank job applicants for specific positions in the recreation field. The respondents were to assume that three applicants had applied for each position. Each applicant, according to his/her resume, had a bachelors degree in recreation and was qualified by education and experience for that position. The subjects were asked to further assume that they had both the resources and the availability of the positions. One of the applicants was described as having no identifiable handicaps and labeled nondisabled. The second applicant was described as not being able to hear sounds and relying on lip reading and sign language as primary modes of communication. This person was labeled deaf. The last applicant was described as having to rely on a wheelchair for mobility. This individual was labeled wheelchairbound. Subjects were requested to rank each applicant according to whom they would employ first, second, and third for each position.

Data relative to each position was analyzed using the Friedman test and examined in order to support or reject the null hypotheses of the study. When appropriate, a post hoc test was used to analyze the significance between each of the variables.

The first position considered was that of secretary. The directors were asked to rank the applicants for the position. A total of 65 (56.5%) directors indicated that the nondisabled applicant would be considered first for the position of secretary. Forty-eight directors (41.7%) indicated that the wheelchairbound applicant would be considered first for the position of secretary. Only 2 directors (1.8%) indicated that the deaf applicant would be considered first for the position of secretary. Table 59 in Appendix C contains these data.

The order in which the directors would consider the three applicants for the position of secretary was studied to determine if a significant difference existed. The results of the Friedman test analysis are presented in Table 7.

The analysis utilizing the Friedman test statistic yielded a $\chi^2 = 141.10$ indicating a significant difference among the rankings of the applicants. A subsequent

Table 7

Friedman Analysis of the Rankings for Secretary

| Category of Applicant | Rank Sum | Friedman Value | <u>p</u> |
|-----------------------|----------|----------------|----------|
| Nondisabled | 166 | | |
| Deaf | 333 | 141.10 | .0000 |
| Wheelchairbound | 191 | | |

analysis was performed to discover exactly which of the variables contributed to the overall significance. The results are presented in Table 8.

A significant difference was found to exist between the rankings of the nondisabled and deaf applicants ($\chi^2 = 92.07$; $p = .0000$). A second significant difference was found between the rankings of the wheelchairbound and deaf applicants. No difference was noted between the nondisabled and wheelchairbound; the deaf applicant was least likely to be selected to perform the duties of a secretary.

Table 8

Subsequent Tests for Determining Significant Differences
Between Rankings of Applicants for
Secretary

| | Nondisabled | Deaf | Wheelchairbound |
|-------------|-------------|---------|-----------------|
| Nondisabled | | 92.07** | 3.54 |
| Deaf | | | 71.68** |

Note. Subsequent tests were performed using the Friedman technique.

** significant at .001 level.

The second position considered was that of lifeguard. The directors ranked the nondisabled, deaf, and wheelchairbound applicants for the position. One hundred sixteen directors (97.3%) ranked the nondisabled applicant first for the position of lifeguard. A total of 3 directors (2.7%) indicated that the deaf applicant would be considered first for the position. None of the directors ranked the wheelchairbound applicant first for the position of lifeguard. Refer to Table 60 in Appendix C for more information.

Table 9 contains the Friedman test analysis that was used to determine if a significant difference existed in the order in which directors would consider the three applicants. The preliminary step in the analysis yielded

Table 9

Friedman Analysis of the Rankings for Lifeguard

| Category of Applicant | Rank Sum | Friedman Value | <u>p</u> |
|-----------------------|----------|----------------|----------|
| Nondisabled | 112 | | |
| Deaf | 229 | 186.99 | .0000 |
| Wheelchairbound | 313 | | |

a Friedman test statistic of 186.99, (p = .0000); this indicated a significant difference among the rankings. Subsequent analysis was utilized to discover which rankings contributed to the overall significance; the results are presented in Table 10.

A significant difference was found to exist between the nondisabled and deaf applicants ($\chi^2 = 73.28$; p = .0000) by the subsequent tests. A difference was also

Table 10

Subsequent Tests for Determining Significant Differences
Between Rankings for the Position of Lifeguard

| Nondisabled | Deaf | Wheelchairbound |
|-------------|---------|-----------------|
| <hr/> | | |
| Nondisabled | 73.28** | 83.27** |
| Deaf | | 55.23** |

Note. Subsequent tests were performed using the
Friedman technique.

**significant at .001 level.

located between the nondisabled and wheelchairbound applicants ($\chi^2 = 83.27$; $p = .0000$); as well as between the deaf and wheelchairbound applicants ($\chi^2 = 55.23$; $p = .0000$). The nondisabled was by far the most desired applicant for the position of lifeguard.

The third position, included in the survey, was that of recreation leader for the general public. The directors ($n = 115$) indicated the order in which the applicants would be considered for the position. Ninety directors (97.5%) indicated that the nondisabled applicant would be considered first for the position of recreation leader for the general public. Seventeen directors (14.8%) indicated that the wheelchairbound applicant would be considered first for the position. Only 8 directors (7.0%) indicated that the deaf applicant would be considered first for the position. Refer to Table 61 in Appendix C for descriptive information related to this position.

The Friedman analysis was used to determine if a significant difference existed in the order in which the directors would consider the applicants. Table 11 presents the outcome of that analysis.

Table 11

Friedman Analysis of the Rankings for
Recreation Leader for the General Public

| Category of Applicant | Rank Sum | Friedman Value | <u>p</u> |
|-----------------------|----------|----------------|----------|
| <hr/> | | | |
| Nondisabled | 147 | | |
| Deaf | 286 | 93.51 | .0000 |
| Wheelchairbound | 257 | | |

The analysis yielded a $\chi^2 = 93.51$; $p = .0000$; this indicated a significant difference among the rankings of applicants. Post hoc tests were utilized to discover which of the applicant rankings contributed to the overall significance. Table 12 presents a matrix of the results of these post hoc tests.

Significant differences between the rankings of the nondisabled and deaf applicants ($\chi^2 = 63.94$; $p = .0000$) and between the nondisabled and wheelchairbound applicants ($\chi^2 = 49.78$; $p = .0000$) were located. The rankings of deaf and wheelchairbound applicants were not found to be significantly different. The applicant most preferred by

Table 12

Subsequent Tests for Determining Significant Differences
Between Rankings for Recreation Leader
for the General Public

| Nondisabled | Deaf | Wheelchairbound |
|-------------|---------|-----------------|
| <hr/> | | |
| Nondisabled | 63.94** | 49.78** |
| Deaf | | 2.56 |

Note. Subsequent tests were performed using the Friedman technique.

** significant at .001 level.

the directors was the nondisabled individual; the wheelchairbound and deaf applicants were not highly desired to fill the position of recreation leader for the general public.

The position of recreation leader for special populations was included in the survey. The directors (n = 119) ranked the nondisabled, deaf, and wheelchairbound applicants for the position of recreation leader for special populations. The wheelchairbound applicant was ranked first by 71 (59.7%) of the directors. Thirty-three

(27.7%) of the directors indicated that the nondisabled applicant would be considered first; only 15 (12.6%) indicated that they would consider the deaf applicant as the first choice for the position of recreation leader for special populations. Refer to Table 62 in Appendix C for more information.

Table 13 contains the results of the Friedman test analysis to determine if a significant difference existed among the rankings of the applicants. The preliminary

Table 13

Friedman Analysis of the Rankings for
Recreation Leader for Special Populations

| Category of Applicant | Rank Sum | Friedman Value | p |
|-----------------------|----------|----------------|-------|
| Nondisabled | 268 | | |
| Deaf | 267 | 43.88 | .0000 |
| Wheelchairbound | 179 | | |

step in the analysis yielded a Friedman test statistic of 43.88, $p = .0000$. The results of the analysis indicated a significant difference among the rankings of the applicants. Subsequent tests were performed to discover exactly which of the rankings contributed to the overall significance; the results are presented in Table 14.

Table 14

Subsequent Tests for Determining Significant Differences
Between Rankings for Recreation Leader
for Special Populations

| | Nondisabled | Deaf | Wheelchairbound |
|-------------|-------------|------|-----------------|
| Nondisabled | | .57 | 15.61** |
| Deaf | | | 34.02** |

Note. Subsequent tests were performed using the Friedman technique.

** significant at .001 level.

Significant differences were found between the nondisabled and wheelchairbound applicants ($\chi^2 = 15.61$, $p = .0001$) and between the wheelchairbound and the deaf applicants ($\chi^2 = 34.02$; $p = .0000$). The wheelchairbound

applicant was the one most desired to serve in the capacity of recreation leader for special populations; the nondisabled and deaf applicants were the least preferred candidates to fill the position.

The fifth position considered was that of recreation facility attendant. Of the 117 directors responding, 65 directors (55.6%) ranked the nondisabled person as the most desirable applicant for the position. Thirty-four (29%) of the directors ranked the wheelchairbound applicant first; only 18 directors (15.4%) ranked the deaf applicant first for such a position. Table 63 in Appendix C includes descriptive information related to the rankings.

The results of the Friedman test analysis are presented in Table 15. The analysis was used to determine if a significant difference existed among the rankings of the applicants.

Table 15
Friedman Analysis of the Position of
Recreation Facility Attendant

| Category of Applicant | Rank Sum | Friedman Value | <u>p</u> |
|-----------------------|----------|----------------|----------|
| Nondisabled | 195 | | |
| Deaf | 269 | 23.61 | .0000 |
| Wheelchairbound | 238 | | |

The analysis yielded a $\chi^2 = 23.61$; $p = .0000$; this indicated a significant difference among the rankings of applicants. Subsequent tests were utilized to discover exactly which of the rankings contributed to the overall significance; the results are presented in Table 16.

Table 16

Subsequent Tests for Determining Significant Differences
Between Rankings for Recreation Facility Attendant

| | Nondisabled | Deaf | Wheelchairbound |
|-------------|-------------|---------|-----------------|
| Nondisabled | | 17.92** | 6.45* |
| Deaf | | | 3.90* |

Note. Subsequent tests were performed using the Friedman technique.

* significant at .05 level.

** significant at .001 level.

As can be seen in Table 16, each ranking was significantly different from each of the other rankings. The difference between the rankings of the nondisabled and deaf was greatest and was significant at the .001 level. The rankings of the wheelchairbound and nondisabled, as well as those of the wheelchairbound and the deaf, were significantly different at .05 level. The nondisabled applicant was the most desirable individual to fill the position of recreation facility attendant; the deaf applicant was the least desirable.

The sixth position considered was that of recreation supervisor. Eighty-five (75.2%) of the responding directors ($n = 113$) indicated that the nondisabled applicant would be considered first for the position of recreation supervisor. Twenty-two directors (19.5%) indicated that the wheelchairbound applicant would be considered first for the position; whereas, only 6 directors (5.3%) indicated that the deaf individual would be considered first for the position of recreation supervisor. Additional descriptive information may be found in Table 64 in Appendix C.

A Friedman test analysis was used to study the order in which the directors would consider the three applicants for the position of recreation supervisor and to determine if a significant difference existed. The results are presented in Table 17.

Table 17

Friedman Analysis of the Rankings for
Recreation Supervisor

| Category of Applicant | Rank Sum | Friedman Value | <u>p</u> |
|-----------------------|----------|----------------|----------|
| Nondisabled | 148 | | |
| Deaf | 287 | 89.33 | .0000 |
| Wheelchairbound | 243 | | |

The preliminary step in the analysis yielded a $\chi^2 = 89.33$; $p = .0000$. Since this indicated a significant difference among the rankings of applicants; subsequent tests were performed to discover exactly which of the rankings contributed to the overall significance. The results are presented in Table 18.

The Friedman test statistic between the nondisabled and deaf applicants was 70.10; $p = .0000$, indicating a significant difference. Significant differences were also located between the nondisabled and wheelchairbound applicants ($\chi^2 = 37.39$; $p = .0000$) and between the deaf

Table 18

Subsequent Tests for Determining Significant Differences
Between Rankings for Recreation Supervisor

| Nondisabled | Deaf | Wheelchairbound |
|-------------|---------|-----------------|
| <hr/> | | |
| Nondisabled | 70.10** | 37.39** |
| Deaf | | 7.44* |

Note. Subsequent tests were performed using the
Friedman technique.

* significant at .05 level.

** significant at .001 level.

and wheelchairbound applicants ($\chi^2 = 7.44$; $p = .024$). The applicant most desired for the position of recreation supervisor was the nondisabled applicant.

The seventh position included in the survey was that of program director. The directors ($n = 114$) ranked the applicants for that position. The nondisabled applicant was ranked first for the position of program director by 65 (57%) of the directors. The wheelchairbound applicant was preferred by 33 (29%) of the directors; only 16 (14%) directors ranked the deaf applicant first for the position of program director. Refer to Table 65 in Appendix C for information relative to the ranking of the applicants for the position of program director.

Table 19 contains the results of the Friedman test which was used to compare the rankings by the directors of the three applicants for the position of program director. The analysis enabled the investigator to determine if a significant difference existed.

A chi square of 45.75 ($p = .0000$) indicated a significant difference among the rankings of the three applicants. Subsequent tests were employed to discover

Table 19

Friedman Analysis of the Rankings for Program Director

| Category of Applicant | Rank Sum | Friedman Value | <u>p</u> |
|-----------------------|----------|----------------|----------|
| Nondisabled | 187 | | |
| Deaf | 284 | 45.75 | .0000 |
| Wheelchairbound | 216 | | |

exactly where the differences were located; the results are presented in Table 20.

The results of the subsequent tests identified significant differences in all comparisons. A significant difference existed between the rankings of the nondisabled and deaf applicants ($\chi^2 = 34.02$; p = .0000). A Friedman test statistic of 5.09 (p = .024) was found between the rankings of the nondisabled and wheelchairbound applicants. The Friedman test between the deaf and wheelchairbound applicants produced a $\chi^2 = 18.73$ (p = .0000). As in most of the previous analyses, the deaf applicant was least desirable for the position of program

Table 20

Subsequent Tests for Determining Significant Differences
Between Rankings for Program Director

| Nondisabled | Deaf | Wheelchairbound |
|-------------|---------|-----------------|
| <hr/> | | |
| Nondisabled | 34.02** | 5.09* |
| Deaf | | 18.73** |

Note. Subsequent tests were performed using the Friedman technique.

* significant at .05 level.

** significant at .001 level.

director; whereas, the nondisabled was the most desired applicant.

The eighth position considered was that of special populations coordinator. Of the 114 directors ranking the three applicants for the position, 61 directors (53.5%) indicated that the wheelchairbound person was the most desirable applicant for the position of special populations coordinator. Thirty-five (30.7%) indicated that the nondisabled applicant would be considered first for the position; however, 18 directors (15.8%) ranked the

deaf individual first for the position of special populations coordinator. Refer to Table 66 in Appendix C for related information.

The Friedman test was used to compare the order in which the directors would consider the three applicants and to determine if a significant difference existed. The results are presented in Table 21.

Table 21

Friedman Analysis of the Rankings for
Special Populations Coordinator

| Category of Applicant | Rank Sum | Friedman Value | <u>p</u> |
|-----------------------|----------|----------------|----------|
| Nondisabled | 245 | | |
| Deaf | 247 | 31.82 | .0000 |
| Wheelchairbound | 173 | | |

The preliminary step in the analysis yielded a $\chi^2 = 31.82$ ($p = .0000$), this indicated a significant difference among the rankings of the applicants by the directors.

Subsequent tests were utilized to discover exactly which of the rankings contributed to the overall significance. Table 22 indicates the outcome of these subsequent tests.

Table 22

Subsequent Tests for Determining Significant Differences
Between Rankings for Special Populations Coordinator

| Nondisabled | Deaf | Wheelchairbound |
|-------------|------|-----------------|
| <hr/> | | |
| Nondisabled | .43 | 12.12** |
| Deaf | | 29.77** |

Note. Subsequent tests were performed using the Friedman technique.

* significant at .05 level.

** significant at .001 level.

The resultant Friedman test statistic between the rankings of the nondisabled and deaf applicants was .43 ($p = .5102$); no difference was revealed. When the rankings of the nondisabled and wheelchairbound applicants were studied a significant difference was located ($\chi^2 = 12.12$; $p = .0005$); this was also true for the comparison between the deaf and wheelchairbound applicants ($\chi^2 = 29.77$; $p = .0000$). The wheelchairbound applicant was selected most frequently as the individual most suitable to fill the position of special populations coordinator. The deaf applicant was considered to be the least suitable of the applicants.

The last position considered was that of recreation superintendent. The directors ranked the nondisabled, deaf, and wheelchairbound applicants for the position. Of the 113 directors, 86 directors (76.1%) indicated that the nondisabled applicant would be considered the primary candidate for the position of recreation superintendent. The wheelchairbound applicant was preferred by 21 (18.6%) of the directors and only six directors (5.3%) indicated that they would consider the deaf applicant first for the position. Refer to Table 67 in Appendix C for additional information related to this position.

Table 23 contains the results of the Friedman test. The test was used to compare the order in which the directors would consider the three applicants and to determine if a significant difference existed.

Table 23
Friedman Analysis of the Rankings for
Recreation Superintendent

| Category of Applicant | Rank Sum | Friedman Value | <u>p</u> |
|-----------------------|----------|----------------|----------|
| Nondisabled | 147 | | |
| Deaf | 286 | 100.41 | .0000 |
| Wheelchairbound | 234 | | |

A Friedman test statistic of 100.41 ($\underline{p} = .0000$) was calculated; this indicated a significant difference among the rankings of the applicants. Subsequent tests were utilized to discover exactly which of the rankings contributed to the overall significance; the outcomes are presented in Table 24.

Table 24

Subsequent Tests for Determining Significant Differences
Between Rankings for Recreation Superintendent

| Nondisabled | Deaf | Wheelchairbound |
|-------------|---------|-----------------|
| <hr/> | | |
| Nondisabled | 70.10** | 42.13** |
| Deaf | | 24.86** |

Note. Subsequent tests were performed using the Friedman technique.

** significant at .001 level.

The subsequent tests between the nondisabled and deaf applicants ($\chi^2 = 70.10$; $p = .0000$), the nondisabled and wheelchairbound applicants ($\chi^2 = 42.13$; $p = .0000$), and the deaf and wheelchairbound applicants ($\chi^2 = 24.86$; $p = .0000$) produced differences between the rankings of the applicants. All were significantly different at the .001 level.

The nondisabled applicant was favored more often for the position of recreation superintendent. The deaf applicant was least favored for the position.

Analysis of Data Related to Specific Job Duties

A total of 127 municipal park and recreation directors were included in the portion of the study concerning the ability of each of the three applicants (nondisabled, deaf, wheelchairbound) to fulfill specific job duties common to the positions of recreation supervisor, program director, and recreation superintendent (U.S. Department of Labor, 1980). The subjects were asked to mark those duties which they believed each of the three applicants could fulfill. Each job duty was analyzed using chi square and examined in order to make decisions concerning the acceptance or rejection of the null hypotheses for this portion of the study.

A chi square analysis was done to determine the directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to demonstrate the use of recreational equipment. The results are presented in Table 25.

Table 25

Analysis of Directors' Expectations of the Applicant's
Ability to Demonstrate the Use of Recreational Equipment

| Group | Yes | No | Chi Square |
|-----------------|-----|----|------------|
| Nondisabled | | | |
| Observed | 127 | 0 | |
| Expected | 100 | 27 | |
| Deaf | | | |
| Observed | 108 | 19 | |
| Expected | 100 | 27 | 94.92** |
| Wheelchairbound | | | |
| Observed | 65 | 62 | |
| Expected | 100 | 27 | |

Note. n = 127

** significant at .001 level.

The analysis yielded a chi square of 94.92, $p = .001$. This indicated a significant difference among the directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to demonstrate the use of recreational equipment.

The chi square summary statistic was studied by a subsequent test to locate which contributed to the overall difference. Results are presented in Table 26.

Table 26

Subsequent Analysis of the Chi Square Statistic
of Directors' Expectations of the Applicant's
Ability to Demonstrate the Use of Recreational Equipment

| Applicant/Expectations | χ^2 | p |
|------------------------|----------|------|
| Deaf/Yes | .64 | .726 |
| Deaf/No | 2.37 | .360 |
| Nondisabled/Yes | 7.29* | .026 |
| Wheelchairbound/Yes | 12.25* | .002 |
| Nondisabled/No | 27.00* | .001 |
| Wheelchairbound/No | 45.37* | .001 |

$$*\chi^2(2) \geq 5.99$$

The cells which contributed to the overall significant chi square were the following:
nondisabled/yes, wheelchairbound/yes, nondisabled/no, and
wheelchairbound/no. The nondisabled applicant was

regarded as being better able to perform the task than was indicated by the expected value. The wheelchairbound applicant was regarded as less able to perform the task than indicated by the expected value.

Table 27 presents the results the chi square analysis regarding the directors' expectation of a nondisabled, deaf, or wheelchairbound person's ability to teach a recreational activity to a group. The analysis yielded a chi square of 70.92, $p = .001$. A significant difference was found among the directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to teach a recreational activity to a group.

Table 27

Analysis of Directors' Expectations of the Applicant's
Ability to Teach a Recreational Activity to a Group

| Group | Yes | No | Chi Square |
|-----------------|-------|------|------------|
| Nondisabled | | | |
| Observed | 125.0 | 2.0 | |
| Expected | 100.3 | 26.6 | |
| Deaf | | | |
| Observed | 71.0 | 56.0 | 70.92** |
| Expected | 100.3 | 26.6 | |
| Wheelchairbound | | | |
| Observed | 105.0 | 22.0 | |
| Expected | 100.3 | 26.6 | |

Note. $n = 127$

** significant at .001 level.

The results of the subsequent tests are presented in Table 28. The tests were performed to locate which cells contributed to the overall difference. The following

Table 28

Subsequent Analysis of the Chi Square Statistic of
Directors' Expectations of the Applicant's Ability to
Teach a Recreational Activity to a Group

| Applicant/Expectations | χ^2 | p |
|------------------------|----------|------|
| Wheelchairbound/Yes | .23 | .896 |
| Wheelchairbound/No | .79 | .674 |
| Nondisabled/Yes | 6.08* | .048 |
| Deaf/Yes | 8.58* | .014 |
| Nondisabled/No | 22.75* | .001 |
| Deaf/No | 32.49* | .001 |

$$*\chi^2(2) \geq 5.99$$

cells contributed to the overall significance:

nondisabled/yes, deaf/yes, nondisabled/no, and deaf/no.

The nondisabled applicant was considered to be more able to teach an activity to a group than indicated by the expected value. Conversely, the deaf applicant was considered to be less able to perform the identical task than predicted.

A chi square analysis was performed to study the directors' expectations of the three applicant's ability to teach a recreational activity to an individual (see

Table 29

Analysis of Directors' Expectations of the Applicant's Ability to Teach a Recreational Activity to an Individual

| Group | Yes | No | Chi Square |
|-----------------|-------|------|------------|
| Nondisabled | | | |
| Observed | 125.0 | 2.0 | |
| Expected | 109.3 | 17.6 | |
| Deaf | | | |
| Observed | 93.0 | 34.0 | 33.83** |
| Expected | 109.3 | 17.6 | |
| Wheelchairbound | | | |
| Observed | 110.0 | 17.0 | |
| Expected | 109.3 | 17.6 | |

Note. n = 127

** significant at .001 level.

Table 29). A chi square of 33.83 ($p = .001$) was calculated which indicated a significant difference between the directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to teach a recreational activity to an individual.

A chi square summary statistic test was performed subsequently to locate which cells contributed to the overall difference. The results are presented in Table 30. The overall significance was attributed to the following cells: nondisabled/no and deaf/no. The nondisabled applicant was viewed as being better able to fulfill the job duty than indicated by the expected value. The expected value indicated that the deaf individual would be viewed as better able to fulfill the job duty than the subsequent test revealed.

Table 30

Subsequent Analysis of the Chi Square Statistic of
Directors' Expectations of the Applicant's Ability to
Teach a Recreational Activity to an Individual

| Applicant/Expectations | χ^2 | <u>p</u> |
|------------------------|----------|----------|
| Wheelchairbound/Yes | .004 | .998 |
| Wheelchairbound/No | .020 | .990 |
| Nondisabled/Yes | 2.260 | .323 |
| Deaf/Yes | 2.430 | .297 |
| Nondisabled/No | 13.830* | .001 |
| Deaf/No | 15.281* | .001 |

$$*\chi^2(2) \geq 5.99$$

The directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to demonstrate recreation activity techniques and methods were analyzed. The results of the chi square test are presented in Table 31.

The analysis yielded a $\chi^2 = 76.88$; p = .001. A significant difference was found to exist among directors' expectations of a nondisabled, deaf, or wheelchairbound

Table 31

Analysis of Directors' Expectations of the Applicant's
Ability to Demonstrate Recreational Activity Techniques
and Methods

| Group | Yes | No | Chi Square |
|-----------------|-------|------|------------|
| Nondisabled | | | |
| Observed | 126.0 | 1.0 | |
| Expected | 97.3 | 29.6 | |
| Deaf | | | |
| Observed | 99.0 | 28.0 | 76.88** |
| Expected | 97.3 | 29.6 | |
| Wheelchairbound | | | |
| Observed | 67.0 | 60.0 | |
| Expected | 97.3 | 29.6 | |

Note. n = 127

** significant at .001 level.

person's ability to demonstrate recreational activity
techniques and methods.

In order to locate which cells contributed to the
overall difference, a subsequent analysis of the chi

square summary statistic was conducted. The results are presented in Table 32.

Table 32

Subsequent Analysis of the Chi Square Statistic of Directors' Expectations of the Applicant's Ability to Demonstrate Recreational Activity Techniques and Methods

| Applicant/Expectations | χ^2 | p |
|------------------------|----------|------|
| Deaf/Yes | .03 | .985 |
| Deaf/No | .09 | .956 |
| Nondisabled/Yes | 8.47* | .014 |
| Wheelchairbound/Yes | 9.44* | .009 |
| Nondisabled/No | 27.63* | .001 |
| Wheelchairbound/No | 31.22* | .001 |

$$*\chi^2_{(2)} \geq 5.99$$

The cells which contributed to the overall significance were the following: nondisabled/yes, wheelchairbound/yes, nondisabled/no, and wheelchairbound/no. The expected value indicated that the nondisabled individual would be less able to demonstrate recreational

activity techniques and methods than the subsequent test revealed. The wheelchairbound applicant was considered less able to perform the same job duty than was indicated by the expected value.

The chi square was used to analyze the directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to explain activity techniques and methods. The results of the analysis are presented in Table 33.

Table 33

Analysis of Directors' Expectations of the Applicant's
Ability to Explain Recreational Activity Techniques
and Methods

| Group | Yes | No | Chi Square |
|-----------------|-------|------|------------|
| Nondisabled | | | |
| Observed | 124.0 | 3.0 | |
| Expected | 97.6 | 29.3 | |
| Deaf | | | |
| Observed | 54.0 | 73.0 | 128.65** |
| Expected | 97.6 | 29.3 | |
| Wheelchairbound | | | |
| Observed | 115.0 | 12.0 | |
| Expected | 97.6 | 29.3 | |

Note. n = 127

** significant at .001 level.

A chi square of 128.65 was calculated ($p = .001$), which indicated a significant difference among the directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to explain recreational

activity techniques and methods. A subsequent analysis of the chi square summary statistic was performed to discover which cells contributed to the overall difference. The results are presented in Table 34.

Table 34

Subsequent Analysis of the Chi Square Statistic of Directors' Expectations of the Applicant's Ability to Explain Recreational Activity Techniques and Methods

| Applicant/Expectations | χ^2 | p |
|------------------------|----------|------|
| Wheelchairbound/Yes | 3.10 | .212 |
| Nondisabled/Yes | 7.14* | .028 |
| Wheelchairbound/No | 10.21* | .006 |
| Deaf/Yes | 19.41* | .001 |
| Nondisabled/No | 23.61* | .001 |
| Deaf/No | 65.18* | .001 |

$$*\chi^2(2) \geq 5.99$$

The cells which contributed to the overall significant difference were the following: nondisabled/yes, wheelchairbound/no, deaf/yes, nondisabled/no, and deaf/no. The nondisabled and wheelchairbound applicants were regarded as being superior in the explanation of activity techniques and methods than was indicated by the expected value. The deaf applicant was regarded as being less able to perform the identical task than was expected.

The ability of a nondisabled, deaf, and wheelchairbound person to observe students and correct mistakes, as viewed by the directors, was analyzed. The results of the chi square test are presented Table 35.

Table 35

Analysis of Directors' Expectations of the Applicant's
Ability to Observe Students and Correct Mistakes

| Group | Yes | No | Chi Square |
|-----------------|-----|----|------------|
| ----- | | | |
| Nondisabled | | | |
| Observed | 124 | 3 | |
| Expected | 115 | 12 | |
| Deaf | | | |
| Observed | 102 | 25 | 24.47** |
| Expected | 115 | 12 | |
| Wheelchairbound | | | |
| Observed | 119 | 8 | |
| Expected | 115 | 12 | |
| ----- | | | |

Note. $n = 127$

** significant at .001 level.

The analysis yielded a $\chi^2 = 24.47$, $p = .001$. This was indicative of a significant difference among the directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to observe students and correct mistakes. The chi square summary statistic was

studied through the use of a subsequent test to locate which cells contributed to the overall difference (see Table 36).

Table 36

Subsequent Analysis of the Chi Square Statistic of Directors' Expectations of the Applicant's Ability to Observe Students and Correct Mistakes

| Applicant/Expectations | χ^2 | p |
|------------------------|----------|------|
| Wheelchairbound/Yes | .14 | .932 |
| Nondisabled/Yes | .70 | .705 |
| Wheelchairbound/No | 1.33 | .514 |
| Deaf/Yes | 1.47 | .480 |
| Nondisabled/No | 6.75* | .034 |
| Deaf/No | 14.08* | .001 |

$$*\chi^2(2) \geq 5.99$$

The overall significance was attributed to the following cells: nondisabled/no and deaf/no. The nondisabled applicant was considered more capable of performing the task than was indicated by the expected

value; however, the deaf individual was considered to be less able to perform the task than was predicted.

Table 37 presents the findings of the analysis of another job duty. A chi square was conducted to

Table 37

Analysis of Directors' Expectations of the Applicant's Ability to Maintain and/or Repair Recreational Equipment

| Group | Yes | No | Chi Square |
|-----------------|-----|----|------------|
| Nondisabled | | | |
| Observed | 125 | 2 | |
| Expected | 114 | 13 | |
| Deaf | | | |
| Observed | 121 | 6 | |
| Expected | 114 | 13 | 42.30** |
| Wheelchairbound | | | |
| Observed | 96 | 31 | |
| Expected | 114 | 13 | |

Note. $n = 127$

** significant at .001 level.

determine the directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to maintain and/or repair recreational equipment.

The analysis yielded a chi square of 42.30 ($p = .001$). A significant difference existed among the directors' expectations.

Table 38 presents the results of the chi square

Table 38

Subsequent Analysis of the Chi Square Statistic of Directors' Expectations of the Applicant's Ability to Maintain and/or Repair Recreational Equipment

| Applicant/Expectations | χ^2 | p |
|------------------------|----------|------|
| Deaf/Yes | .42 | .811 |
| Nondisabled/Yes | 1.06 | .589 |
| Wheelchairbound/Yes | 2.83 | .242 |
| Deaf/No | 3.77 | .152 |
| Nondisabled/No | 9.30* | .010 |
| Wheelchairbound/No | 24.92* | .001 |

$$*\chi^2_{(2)} \geq 5.99$$

summary statistic subsequent test. The analysis was performed to locate those cells which contributed to the overall difference.

The overall significant chi square can be attributed to the following cells: nondisabled/no and wheelchair-bound/no. The nondisabled applicant was viewed as being better able to maintain and/or repair equipment than was indicated by the expected value. The expected value indicated that the wheelchairbound individual would be viewed as being better able to perform the same job duty than the subsequent test revealed.

Table 39 contains the results of the analysis regarding the directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to purchase and/or sell recreational equipment. A chi square of 92.91 was calculated ($p = .001$); the directors' expectations of the applicant's ability to purchase and/or sell recreational equipment were found to be significantly different.

Table 39

Analysis of Directors' Expectations of the Applicant's
Ability to Purchase and/or Sell Recreational Equipment

| Group | Yes | No | Chi Square |
|-----------------|-------|------|------------|
| Nondisabled | | | |
| Observed | 123.0 | 4.0 | |
| Expected | 108.3 | 18.6 | |
| Deaf | | | |
| Observed | 77.0 | 50.0 | 92.91** |
| Expected | 108.3 | 18.6 | |
| Wheelchairbound | | | |
| Observed | 125.0 | 2.0 | |
| Expected | 108.3 | 18.6 | |

Note. n = 127

** significant at .001 level.

The results of the subsequent analysis are presented in Table 40. The chi square summary was calculated to determine where the differences were located.

Table 40

Subsequent Analysis of the Chi Square Statistic of Directors' Expectations of the Applicant's Ability to Purchase and/or Sell Recreational Equipment

| Applicant/Expectations | χ^2 | p |
|------------------------|----------|------|
| Nondisabled/Yes | 1.99 | .370 |
| Wheelchairbound/Yes | 2.58 | .275 |
| Deaf/Yes | 9.05* | .011 |
| Nondisabled/No | 11.46* | .003 |
| Wheelchairbound/No | 14.82* | .001 |
| Deaf/No | 53.01* | .001 |

$$*\chi^2(2) \geq 5.99$$

The cells which contributed to the overall significant difference were the following cells: deaf/yes, nondisabled/no, wheelchairbound/no, and deaf/no. Both the wheelchairbound and nondisabled applicants were considered

more able to perform the task than was indicated by the expected value. The deaf applicant was considered less able to perform the task than was indicated by the expected value.

The analysis regarding the directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to coordinate work schedules of personnel is presented in Table 41. Chi square was utilized to determine if differences existed.

The analysis yielded a chi square of 6.03, $p = .049$. A significant difference was found to exist among the directors' expectations of a nondisabled, deaf, and wheelchairbound person's ability to coordinate work schedules of personnel.

Table 41

Analysis of Directors' Expectations of the Applicant's
Ability to Coordinate Schedules of Personnel

| Group | Yes | No | Chi Square |
|-----------------|-------|------|------------|
| Nondisabled | | | |
| Observed | 122.0 | 5.0 | |
| Expected | 121.3 | 5.6 | |
| Deaf | | | |
| Observed | 117.0 | 10.0 | 6.03* |
| Expected | 121.3 | 5.6 | |
| Wheelchairbound | | | |
| Observed | 125.0 | 2.0 | |
| Expected | 121.3 | 5.6 | |

Note. n = 127

* significant at .05 level.

A subsequent analysis of the chi square summary statistic was calculated to discover which cells contributed to the overall difference (see Table 42). The subsequent tests to determine which cells contributed to the overall significant chi square were inconclusive.

Table 42

Subsequent Analysis of the Chi Square Statistic of
Directors' Expectations of the Applicant's Ability to
Coordinate Schedules of Personnel

| Applicant/Expectations | χ^2 | p |
|------------------------|----------|------|
| Nondisabled/Yes | .00 | 1.00 |
| Nondisabled/No | .05 | .970 |
| Wheelchairbound/Yes | .10 | .928 |
| Deaf/Yes | .14 | .928 |
| Wheelchairbound/No | 2.30 | .315 |
| Deaf/No | 3.44 | .177 |

$$\chi^2 (2) \leq 5.99$$

The results of the analysis regarding the director's expectations of each applicant's ability to be able to plan and develop a recreational program are presented in Table 43. The analysis yielded a $\chi^2 = 15.21$ ($p = .001$). A significant difference was found among the directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to plan and develop a recreational program.

Table 43

Analysis of Directors' Expectations of the Applicant's
Ability to Plan and Develop a Recreational Program

| Group | Yes | No | Chi Square |
|-----------------|-------|------|------------|
| Nondisabled | | | |
| Observed | 122.0 | 5.0 | |
| Expected | 119.3 | 7.6 | |
| Deaf | | | |
| Observed | 111.0 | 16.0 | 15.21** |
| Expected | 119.3 | 7.6 | |
| Wheelchairbound | | | |
| Observed | 125.0 | 2.0 | |
| Expected | 119.3 | 7.6 | |

Note. n = 127

** significant at .001 level.

A subsequent analysis of chi square summary statistic was performed to discover which of the cells contributed to the overall significance. Table 44 presents the results.

Table 44

Subsequent Analysis of the Chi Square Statistic of
Directors' Expectations of the Applicant's Ability to
Plan and Develop a Recreational Program

| Applicant/Expectations | χ^2 | <u>p</u> |
|------------------------|----------|----------|
| Nondisabled/Yes | .06 | .970 |
| Wheelchairbound/Yes | .27 | .874 |
| Deaf/Yes | .58 | .748 |
| Nondisabled/No | .89 | .641 |
| Wheelchairbound/No | 4.13 | .127 |
| Deaf/No | 9.28* | .010 |

* $\chi^2_{(2)} \geq 5.99$

The cell which contributed to the overall significant chi square was the deaf/no cell. The deaf applicant was regarded as being less able to plan and develop a program than was indicated by the expected value.

The directors' expectations of each applicant's ability to promote the program were studied. The results of the analysis are presented in Table 45.

Table 45

Analysis of Directors' Expectations of the Applicant's
Ability to Promote the Recreational Program

| Group | Yes | No | Chi Square |
|-----------------|-------|------|------------|
| Nondisabled | | | |
| Observed | 124.0 | 3.0 | 92.78** |
| Expected | 108.3 | 18.6 | |
| Deaf | | | |
| Observed | 77.0 | 50.0 | 92.78** |
| Expected | 108.3 | 18.6 | |
| Wheelchairbound | | | |
| Observed | 124.0 | 3.0 | 92.78** |
| Expected | 108.3 | 18.6 | |

Note. n = 127

** significant at .001 level.

The analysis yielded a $\chi^2 = 92.78$, $p = .001$, which indicated a significant difference among the directors' expectations of a nondisabled, deaf, and wheelchairbound person's ability to promote the recreational program. A subsequent analysis of the chi square summary statistic

was done to locate which cells contributed to the overall difference. The results are presented in Table 46.

Table 46

Subsequent Analysis of the Chi Square Statistic of
Directors' Expectations of the Applicant's Ability to
Promote the Recreational Program

| Applicant/Expectations | χ^2 | p |
|------------------------|----------|------|
| Nondisabled/Yes | 2.28 | .320 |
| Wheelchairbound/Yes | 2.28 | .320 |
| Deaf/Yes | 9.05* | .011 |
| Nondisabled/No | 13.08* | .001 |
| Wheelchairbound/No | 13.08* | .001 |
| Deaf/No | 53.01* | .001 |

$$*\chi^2(2) \geq 5.99$$

The cells which contributed to the overall significant difference were the following: deaf/yes, nondisabled/no, wheelchairbound/no, and deaf/no. The nondisabled and wheelchairbound applicants were considered better able to promote the recreational program than predicted. Conversely, the deaf applicant was considered less able to fulfill the function of program promotion than was indicated by the expected value.

Another job function investigated in this study was that of documenting and completing paperwork for a recreational activity program. The directors' provided their expectations relative to each applicant's ability to complete such a function. The results are presented in Table 47.

Table 47

Analysis of Directors' Expectations of the Applicant's
Ability to Document and Complete Paperwork in a
Recreational Activity Program

| Group | Yes | No | Chi Square |
|-----------------|-------|----|------------|
| Nondisabled | | | |
| Observed | 124.0 | 3 | |
| Expected | 120.6 | 4 | |
| Deaf | | | |
| Observed | 119.0 | 8 | 6.71* |
| Expected | 120.6 | 4 | |
| Wheelchairbound | | | |
| Observed | 126.0 | 1 | |
| Expected | 120.6 | 4 | |

Note. n = 127

* significant at .05 level.

The analysis yielded a chi square of 6.71 ($p = .035$); this indicated a significant difference among the directors' expectations. The results of a subsequent analysis of the chi square summary statistic are presented

in Table 48. The analysis was performed to locate which cells contributed to the overall difference. The

Table 48

Subsequent Analysis of the Chi Square Statistic of Directors' Expectations of the Applicant's Ability to Document and Complete Paperwork in a Recreational Activity Program

| Applicant/Expectations | χ^2 | p |
|------------------------|----------|------|
| Nondisabled/Yes | .01 | .995 |
| Wheelchairbound/Yes | .07 | .966 |
| Deaf/Yes | .13 | .937 |
| Nondisabled/No | .25 | .882 |
| Wheelchairbound/No | 2.25 | .325 |
| Deaf/No | 4.00 | .135 |

$$\chi^2_{(2)} \leq 5.99$$

subsequent test to determine which cells contributed to the overall significant difference was inconclusive.

The directors' expectations of each of the three applicant's ability to train staff was also studied. The chi square analysis results are presented in Table 49.

Table 49

Analysis of Directors' Expectations of the Applicant's
Ability to Train Staff

| Group | Yes | No | Chi Square |
|-----------------|-------|------|------------|
| Nondisabled | | | |
| Observed | 126.0 | 1.0 | |
| Expected | 100.6 | 26.3 | |
| Deaf | | | |
| Observed | 63.0 | 64.0 | 106.09** |
| Expected | 100.6 | 26.3 | |
| Wheelchairbound | | | |
| Observed | 113.0 | 14.0 | |
| Expected | 100.6 | 26.3 | |

Note. n = 127

** significant at .001 level.

A chi square of 106.09 was calculated ($p = .001$). The directors' expectations of the applicants' abilities to train staff were found to be significantly different.

Table 50 presents the results of the subsequent

Table 50

Subsequent Analysis of the Chi Square Statistic of
Directors' Expectations of the Applicant's Ability to
Train Staff

| Applicant/Expectations | χ^2 | p |
|------------------------|----------|------|
| Wheelchairbound/Yes | 1.53 | .465 |
| Wheelchairbound/No | 5.72 | .057 |
| Nondisabled/Yes | 6.41* | .041 |
| Deaf/Yes | 14.05* | .001 |
| Nondisabled/No | 24.34* | .001 |
| Deaf/No | 54.04* | .001 |

$$*\chi^2(2) \geq 5.99$$

analysis of the chi square summary. The analysis was performed to determine where the differences were located.

The overall significant chi square was attributed to the following cells: nondisabled/yes, deaf/yes, nondisabled/no, and deaf/no. The nondisabled applicant was regarded as being better able to train staff than was indicated by the expected value. The deaf applicant was regarded as being less able to train staff.

The results of the chi square analysis regarding the directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to evaluate staff are presented in Table 51. The analysis yielded a chi square of 25.84 ($p = .001$). A significant difference was found among the directors' expectations of each of the applicant's ability to evaluate staff.

Table 51

Analysis of Directors' Expectations of the Applicant's
Ability to Evaluate Staff

| Group | Yes | No | Chi Square |
|-----------------|-----|----|------------|
| Nondisabled | | | |
| Observed | 124 | 3 | |
| Expected | 118 | 9 | |
| Deaf | | | |
| Observed | 106 | 21 | |
| Expected | 118 | 9 | 25.84** |
| Wheelchairbound | | | |
| Observed | 124 | 3 | |
| Expected | 118 | 9 | |

Note. n = 127

** significant at .001 level.

Table 52 presents the results of the subsequent chi square summary tests that were calculated to locate which contributed to the overall difference. The only cell which contributed to the overall significant chi square was the deaf/no. This indicated that the directors

regarded the deaf applicant as being less able to evaluate staff than was expected.

Table 52

Subsequent Analysis of the Chi Square Statistic of
Directors' Expectations of the Applicant's Ability to
Evaluate Staff

| Applicant/Expectations | χ^2 | p |
|------------------------|----------|------|
| Nondisabled/Yes | .31 | .856 |
| Wheelchairbound/Yes | .31 | .856 |
| Deaf/Yes | 1.22 | .543 |
| Nondisabled/No | 4.00 | .135 |
| Wheelchairbound/No | 4.00 | .135 |
| Deaf/No | 16.00* | .001 |

$$*\chi^2(2) \geq 5.99$$

The directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to interpret services to public and participants was investigated. The results of that analysis are presented in Table 53.

Table 53

Analysis of Directors' Expectations of the Applicant's
Ability to Interpret Services to Public and Participants

| Group | Yes | No | Chi Square |
|-----------------|-----|----|------------|
| Nondisabled | | | |
| Observed | 126 | 1 | |
| Expected | 98 | 29 | |
| Deaf | | | |
| Observed | 48 | 79 | |
| Expected | 98 | 29 | 168.38** |
| Wheelchairbound | | | |
| Observed | 124 | 7 | |
| Expected | 98 | 29 | |

Note. (n) = 127

** significant at .001 level.

The analysis yielded a $\chi^2 = 168.38$, $p = .001$,; this indicated a significant difference among the directors' expectations. Subsequent chi square tests were performed to locate which of the cells contributed to the overall

significant difference. The results are presented in Table 54.

Table 54

Subsequent Analysis of the Chi Square Statistic of Directors' Expectations of the Applicant's Ability to Interpret Services to Public and Participants

| Applicant/Expectations | χ^2 | p |
|------------------------|----------|------|
| Wheelchairbound/Yes | 4.94* | .085 |
| Nondisabled/Yes | 8.00* | .018 |
| Wheelchairbound/No | 16.69* | .001 |
| Deaf/Yes | 25.51* | .001 |
| Nondisabled/No | 27.03* | .001 |
| Deaf/No | 86.21* | .001 |

$$*\chi^2_{(2)} \geq 5.99$$

All of the cells contributed to the overall significance. The nondisabled and wheelchairbound applicants were considered more able to interpret services to public and participants than was indicated by the expected chi square value. The deaf applicant was

considered less able to perform the same job function.

Analyses of the ATDP Scores

The directors were asked to complete the Attitudes Toward Disabled Persons Scale (ATDP) in order to determine their attitudes concerning the handicapped. It was found that the vast majority of the directors possessed average to very favorable attitudes toward disabled persons. The ATDP scale allows for a range in scoring from zero to 180. The lowest score attained by a director in this study was 64; the highest score was 167. The range of scores of the participants was 103 with the mean ATDP score being 120.84.

The final phase of the investigation included analyses of the ATDP scores as related to the variables of sex, age, educational attainment, and previous contact with disabled individuals. The variables were examined using the Mann-Whitney U test (sex) and the Kruskal-Wallis test (age, educational attainment, and previous contact with disabled persons) in order to accept or reject the null hypotheses related to this portion of the study. These were all tested at the .05 level of significance.

Table 55 contains information regarding the analysis of the difference in ATDP scores when the sex of the director was considered. A total of 17 female directors and 91 male directors were included in the analysis of ATDP scores by sex.

Table 55

Results of the Mann-Whitney Analysis of
ATDP Scores in Relation to Sex

| Sex | <u>N</u> | Rank Sum | <u>U</u> | <u>p</u> |
|--------|----------|-------------|----------|----------|
| Male | 91 | 4,912.5 | 726.5 | .692 |
| Female | 17 | 973.5 | | |

The Mann-Whitney U analysis yielded a U of 726.5 (p = .692). There was no difference in the ATDP scores of the respondents when grouped by sex.

The Kruskal-Wallis analysis was done to determine if age presented differences in ATDP scores. The results are presented in Table 56.

Table 56
Results of the Kruskal-Wallis Analysis of
ATDP Scores in Relation to Age

| Age | <u>N</u> | Rank Sum | <u>H</u> | <u>p</u> |
|-------|----------|-------------|----------|----------|
| 22-30 | 25 | 1,427.5 | | |
| 31-39 | 55 | 3,585.5 | | |
| 40-48 | 21 | 1,358.5 | 1.22 | .875 |
| 49-57 | 17 | 1,048.5 | | |
| 58+ | 6 | 330.0 | | |

Subjects ($n = 124$) were grouped according to age. Twenty-five subjects were between the ages of 23 to 30, 55 between the ages of 31 to 39, 21 between the ages of 40 to 48, 17 between the ages of 49 to 57, and 6 were over 58 years of age.

The Kruskal-Wallis test yielded an H of 1.22 ($p = .875$). This indicated that there was no difference among the ATDP scores when subjects were grouped by age.

The Kruskal-Wallis test was used to determine if differences existed in the ATDP scores when subjects were grouped according to the highest level of education attained. Table 57 includes the results of the analysis.

Table 57

Results of the Kruskal-Wallis Analysis of
ATDP Scores in Relation to Educational Attainment

| Variables | <u>N</u> | Rank Sum | <u>H</u> | <u>p</u> |
|--------------|----------|-------------|----------|----------|
| High School | 8 | 442.5 | | |
| Some College | 23 | 1,533.5 | | |
| Bachelors | 60 | 3,504.5 | 3.14 | .534 |
| Masters | 32 | 2,231.0 | | |
| Doctorate | 1 | 38.5 | | |

A total of 124 subjects were included in the analysis of ATDP scores as related to educational attainment. The highest level of education attained for 8 subjects was the completion of high school; 23 had attended college, 60 had received a bachelors degree, 32 had received a masters degree, and 1 had earned the doctorate.

The Kruskal-Wallis yielded an $H = 3.14$, $p = .534$. This showed that when subjects were grouped according to the highest educational level attained, no difference in ATDP scores resulted among the groups.

Table 58 contains information regarding the relation of the ATDP scores to previous exposure to disabled persons. A total of 104 subjects indicated having had some exposure to disabled persons and 22 indicated having had no previous experience. These subjects ($n = 126$) were included in the comparison of ATDP scores and the type of experience with with disabled persons.

Table 58

Results of the Kruskal-Wallis Analysis of
ATDP Scores in Relation to Previous Experience with
Disabled Persons

| Variables | <u>N</u> | Rank Sum | <u>H</u> | <u>p</u> |
|--------------------------|----------|-------------|----------|----------|
| <hr/> | | | | |
| Disabled Respondent | 4 | 627.0 | | |
| Family/ Relative(s) | 28 | 3,842.5 | | |
| Friend/ Acquaintances | 79 | 10,792.5 | | |
| Work Peers | 26 | 3,599.5 | | |
| Employee(s) | 54 | 7,362.0 | 11.9 | .101 |
| Consumer(s) | 45 | 5,735.0 | | |
| Boss(es) | 3 | 467.5 | | |
| No Experience | 22 | 1,765.0 | | |

The Kruskal-Wallis yielded an H of 11.9 (p = .101).
There was no difference between the ATDP scores of the
directors when grouped according to the type of previous
experience with disabled persons.

CHAPTER V
SUMMARY, CONCLUSION, DISCUSSION, AND
RECOMMENDATIONS

In today's society there is a growing awareness of disabled individuals. Disabled children are being mainstreamed in the public schools and municipal recreation centers. Federal and state legislation has addressed more issues concerning education, employment, and legal rights of disabled persons (Donaldson, 1981). During the International Year of Disabled Persons (1981-1982), the media has brought disabled characters, both real and imaginary, into millions of homes (Research, 1981). The major emphasis of these broadcasts has been to feature disabled individuals as successful participants within all walks of life. With the increase of positive disabled role models, it is important to anticipate that more disabled persons will be seeking higher levels of personal and professional achievement.

Rehabilitation counselors and all other professionals working with the disabled population should be encouraging

their clients to explore new professions. It is the responsibility of all therapeutic professionals to inform disabled persons of the ever-increasing opportunities and importance of acquiring a degree in higher education; such a degree might increase their employment and leisure potential.

Many researchers have investigated employers attitudes toward hiring disabled applicants. The findings of these studies have been contradictory. Some of the results have indicated positive attitudes and good employment potential (Chandler, 1960; Emenu & McHargue, 1978; Florian, 1978). The findings from other studies, however, have indicated negative attitudes and poor employment potential for disabled persons (Florian, 1981; Phillips, 1975; Schletzer, Darvis, England, & Lofquist, 1961; and Seifert, 1979). The findings from the present study concur with the findings of the latter investigations.

The purpose of this study was to survey municipal park and recreation directors attitudes toward disabled persons in general, and their perceptions of disabled persons within specific jobs and performing specific job functions. The problem of the study was to determine the

preconceptions of municipal park and recreation directors in the southwest region of the United States toward hiring university recreation graduates with a disability. The study involved the collection of data from 130 municipal park and recreation directors from Texas, Oklahoma, Louisiana, New Mexico, and Arkansas. A questionnaire was utilized as the data collection device.

Summary of the Findings

The following hypotheses were tested at the .05 level of significance:

1. There are no significant differences among directors' preferences for nondisabled, deaf, or wheelchairbound applicants for the position of secretary.

REJECTED

2. There are no significant differences among directors' preferences for nondisabled, deaf, or wheelchairbound applicants for the position of lifeguard.

REJECTED

3. There are no significant differences among directors' preferences for nondisabled, deaf, or wheelchairbound applicants for the position of recreation leader for the general public. REJECTED

4. There are no significant differences among directors' preferences for nondisabled, deaf, or wheelchairbound applicants for the position of recreation leader for special populations. REJECTED

5. There are no significant differences among directors' preferences for nondisabled, deaf, or wheelchairbound applicants for the position of recreation facility attendant. REJECTED

6. There are no significant differences among directors' preferences for nondisabled, deaf, or wheelchairbound applicants for the position of recreation supervisor. REJECTED

7. There are no significant differences among directors' preferences for nondisabled, deaf, or wheelchairbound applicants for the position of program director. REJECTED

8. There are no significant differences among directors' preferences for nondisabled, deaf, or wheelchairbound applicants for the position of special populations coordinator. REJECTED

9. There are no significant differences among directors' preferences for nondisabled, deaf, or

wheelchairbound applicants for the position of recreation superintendent. REJECTED

10. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to demonstrate use of recreational equipment. REJECTED

11. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to teach a recreational activity to a group. REJECTED

12. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to teach a recreational activity to an individual. REJECTED

13. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to explain recreational activity techniques and methods. REJECTED

14. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to demonstrate recreational activity techniques and methods. REJECTED

15. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to observe students and correct mistakes. REJECTED

16. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to maintain and/or repair recreational equipment. REJECTED

17. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to purchase and/or sell recreational equipment. REJECTED

18. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to coordinate work schedules of personnel. REJECTED

19. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to plan and develop a recreation program. REJECTED

20. There are no significant differences among directors' expectations of a nondisabled, deaf, or

wheelchairbound person's ability to promote the recreation program. REJECTED

21. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound person's ability to document and complete paperwork in an activity program. REJECTED

22. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound persons' ability to train staff. REJECTED

23. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound persons' ability to evaluate staff. REJECTED

24. There are no significant differences among directors' expectations of a nondisabled, deaf, or wheelchairbound persons' ability to interpret services to the public and participants. REJECTED

25. There is no significant difference between the ATDP scores of female and male directors. ACCEPTED

26. There are no significant differences between the ATDP scores of directors' in relationship to age. ACCEPTED

27. There are no significant differences among the ATDP scores of directors when related to educational achievement. ACCEPTED

28. There are no significant differences among the ATDP scores of directors when related to various types of experiences with disabled persons. ACCEPTED

A total of 130 municipal park and recreation directors participated in this investigation. There were 71.5% male directors and 13.1% female directors. The greatest percentage (46.2%) of the respondents were in the 31-39 age category. Educational attainment for 73.9% of the respondents was a bachelors or masters degree. A total of 55.2% of those holding a degree had earned a degree in recreation. A total of 81.5% of the respondents indicated having had some exposure to disabled individuals and almost half (45.4%) had interviewed a disabled applicant.

Conclusion

Based upon the findings, it can be concluded that differences in employment opportunities between nondis-

abled university recreation graduates and university recreation graduates with a disability appear to be attributable to disability based factors. Furthermore, municipal park and recreation directors expect disabled recreation professionals to be limited in their abilities to fulfill specific job functions.

Discussion

The results of the present study are substantiated by several of the articles included in the chapter of related literature. Many of the investigators concluded that employment opportunities for disabled persons were limited (Florian, 1981; Phillips, 1975; Schletzer et al., 1961; Seifert, 1979).

Yuker, Block, and Young (1970) collected statistics from a large number of studies which indicated a high relationship between ATDP scores and the variables of age, sex, experience with disabled persons, and educational background. Siller and Chipman (1964) examined ATDP scores in relationship to the same variables. The investigators found only trivial relationships between ATDP scores and each of the variables. The results of the present study concur with the conclusions stated by Siller and Chipman (1964).

Yuker et al. (1970) contended that studies of disability preference were generally consistent in their findings. When disabled persons were rated in occupational or professional capacities, the physical disabilities (amputee, spina bifida, etc.) were preferred over sensory disabilities (blind, deaf, etc.). The latter were preferred over brain disabilities (cerebral palsy, epilepsy, mental retardation, etc.). The findings of the present investigation support the generalization of preferring physically disabled persons to sensory disabled persons in professional capacities.

The deaf applicant was preferred least for most of the recreation positions and viewed as unable to fulfill many job functions; especially those involving communication with people. The most obvious barrier might be identified as telephone use by the secretary. However, a person obtaining a degree would be overqualified for the position of secretary. The other positions primarily utilize other forms of communication such as face-to-face interaction and written communication. The deaf university graduate would have utilized similar communication skills to obtain the recreation degree.

The directors indicated that the wheelchairbound

person would be limited in recreation positions involving physical action. A major concern involved the safety of participants being supervised by a wheelchairbound lifeguard. Ultimately, the same reservations should be extended to every applicant for a lifeguard position. Does this applicant have the ability to save another person in the manner advocated by the American Red Cross? The answer is yes, many disabled persons can fulfill the expectations of the position regardless of their handicapping condition.

The same criteria should be utilized to evaluate all applicants for recreation positions. Does this individual have the skills necessary to successfully fulfill the expectations of the position? This investigation indicated that nondisabled, deaf, and wheelchairbound applicants would not experience equal consideration when applying for positions within the municipal park and recreation system. The fictitious applicants were granted bachelors degrees in recreation and thus trained for the positions of recreation supervisor, program director, and recreation superintendent. However, the disabled applicants were perceived as being less desirable for these positions.

The results of this study seem to indicate that employment of disabled persons in recreation is a problem. The responsibility of improving the employment status of disabled persons should be shared by recreation professionals and educators alike. Increased effort in educating potential employers through workshops, inservices, and direct contact is indicated. Continued positive media coverage will provide opportunities for increased public awareness of the capabilities of disabled individuals. By no means are disabled persons without responsibility in this endeavor. Disabled individuals should continually improve and upgrade their living, working, and leisure skills. Increased visibility of disabled individuals leading active and productive lives could positively effect the attitudes of the general public including potential employers.

Are the disabled students within our recreation curriculum being deluded? Are we providing them with the knowledge and skills to become recreational professionals when they cannot, in actuality, fulfill the directors' expectations for the positions? Or are recreation employers denying the field of a potential Franklin D. Roosevelt (polio victim), Albert Einstein (learning

disabled), John Sabastian Bach (deaf), or an Edgar Allen Poe (drug abuser) because of a physical, mental, psychological, or emotional disability? Can recreation survive the practice of discrimination?

Recommendations for Further Studies

The following are being made as recommendations for further study:

1. Replicate the study in other NRPA regions within the United States.
2. Replicate the study with disabled university recreation students and graduates.
3. Replicate the study with recreation educators.
4. Replicate the study with therapeutic recreational professionals.
5. Replicate the study with recreation leaders and supervisors.
6. Replicate the study with the recreation directors of volunteer, commercial, and private agencies and compare the results with the present study.

APPENDICES

APPENDIX A
CORRESPONDENCE

April 29, 1982

Dear Participant:

I am a masters candidate at Texas Woman's University and I am surveying recreation professionals, such as yourself.

The questionnaire contained herein is designed to evaluate the potential employment status of university recreation graduates with a disability in the southwest region of the United States. Your replies are in strict confidence and will be used for research purposes only.

I would appreciate hearing from you by May 20, 1982 which would allow me to adhere to my research time frame. If you would like a copy of the results of the study, please include a stamped, self-addressed envelope. Thank you very much for participating in the study. I am looking forward to receiving your response.

Sincerely,

A handwritten signature in cursive script that reads "Debbie Alcouloumre".

Debbie Alcouloumre
Box 25444 TWU

Dear Director:

Recently you received a questionnaire about the employment potential of disabled university recreation graduates. Please complete the questionnaire and mail it in the envelope provided.

Your cooperation is urgently needed and greatly appreciated. If you have already returned the questionnaire, thank you.

Sincerely,



Debbie Alcouloumre
TWU Masters Candidate

APPENDIX B
QUESTIONNAIRE

DEMOGRAPHIC INFORMATION PART I

Yes No

ATTITUDE TOWARD DISABLED PERSONS SCALE-B PART II

This portion of the survey will take approximately 15 minutes. Please circle one of the following numbers for each statement.

- +3 I agree very much
- +2 I agree pretty much
- +1 I agree a little
- 1 I disagree a little
- 2 I disagree pretty much
- 3 I disagree alot

- | | |
|--|-------------------|
| 1. Disabled persons are usually friendly. | -3 -2 -1 +1 +2 +3 |
| 2. People who are disabled should not have to pay income tax. | -3 -2 -1 +1 +2 +3 |
| 3. Disabled people are no more emotional than other people. | -3 -2 -1 +1 +2 +3 |
| 4. Disabled persons can have a normal social life. | -3 -2 -1 +1 +2 +3 |
| 5. Most physically disabled persons have a chip on their shoulders. | -3 -2 -1 +1 +2 +3 |
| 6. Disabled workers can be as successful as nondisabled workers. | -3 -2 -1 +1 +2 +3 |
| 7. Very few disabled persons are ashamed of their disabilities. | -3 -2 -1 +1 +2 +3 |
| 8. Most persons feel uncomfortable when they associate with disabled people. | -3 -2 -1 +1 +2 +3 |
| 9. Disabled people show less enthusiasm than nondisabled people. | -3 -2 -1 +1 +2 +3 |
| 10. Disabled people do not become more easily upset than nondisabled people. | -3 -2 -1 +1 +2 +3 |
| 11. Disabled people are less aggressive than normal people. | -3 -2 -1 +1 +2 +3 |
| 12. Most disabled people get married and have children. | -3 -2 -1 +1 +2 +3 |

- | | |
|---|-------------------|
| 13. Most disabled persons do not worry more than anyone else. | -3 -2 -1 +1 +2 +3 |
| 14. Employers should not be allowed to fire disabled employees. | -3 -2 -1 +1 +2 +3 |
| 15. Disabled persons are not as happy as nondisabled people. | -3 -2 -1 +1 +2 +3 |
| 16. Severely disabled people are harder to get along with than those with minor disabilities. | -3 -2 -1 +1 +2 +3 |
| 17. Most disabled persons expect special treatment. | -3 -2 -1 +1 +2 +3 |
| 18. Disabled persons should not expect to live normal lives. | -3 -2 -1 +1 +2 +3 |
| 19. Most disabled persons tend to get discouraged easily. | -3 -2 -1 +1 +2 +3 |
| 20. The worst thing that could happen to a person would be for him to be severely disabled. | -3 -2 -1 +1 +2 +3 |
| 21. Disabled children should not have to compete with nondisabled children. | -3 -2 -1 +1 +2 +3 |
| 22. Most disabled people do not feel sorry for themselves. | -3 -2 -1 +1 +2 +3 |
| 23. Most disabled people prefer to work with other disabled people. | -3 -2 -1 +1 +2 +3 |
| 24. Most severely disabled people are not as ambitious as other people. | -3 -2 -1 +1 +2 +3 |
| 25. Disabled people are not as confident as physically normal people. | -3 -2 -1 +1 +2 +3 |
| 26. Most disabled persons don't want affection and praise more than other people. | -3 -2 -1 +1 +2 +3 |
| 27. It would be best if a disabled person married another disabled person. | -3 -2 -1 +1 +2 +3 |
| 28. Most disabled persons do not need special attention. | -3 -2 -1 +1 +2 +3 |
| 29. Disabled persons want sympathy more than other people. | -3 -2 -1 +1 +2 +3 |

30. Most physically disabled persons have different personalities than normal people. -3 -2 -1 +1 +2 +3

EMPLOYABILITY PART III

This portion of the questionnaire is designed to identify a number of selected recreation jobs and job duties that employers view as possible for disabled individuals to fulfill.

Assume that three individuals have applied for each position listed. Each applicant, according to his/her resume, has a bachelors degree in recreation and is qualified, by education and experience, for that position. Given the resources and the availability of the positions, please rank your preferences for each position by assigning a "1" to your first choice, a "2" to your second choice, and a "3" to your last choice. Please do this for each position listed. In other words, which applicant would you be apt to employ first, second, and third for each position.

One of the applicants has no identifiable handicaps and will be referred to as nondisabled. The second applicant cannot hear sounds and relies on lip reading and sign language as primary modes of communication. This person will be referred to as deaf. The last applicant relies on a wheelchair for mobility. This individual will be referred to as wheelchairbound.

| | Nondisabled | Deaf | Wheelchairbound |
|--|-------------|------|-----------------|
| (Example) Custodian | 2 | 1 | 3 |
| Secretary | | | |
| Lifesguard | | | |
| Recreation Leader (General Public) | | | |
| Recreation Leader (Special Populations) | | | |
| Recreation Facility Attendant | | | |
| Recreation Supervisor | | | |
| Program Director | | | |
| Special Population Coordinator | | | |
| Recreation Superintendent | | | |

Here are various Job duties common to several recreation positions. Please place a check (✓) in the columns beside those duties which you believe each of the three applicants could fulfill. Please refer to the applicants mentioned on the previous page when completing this portion of the questionnaire: nondisabled (NON), deaf (D), and wheelchairbound (W/C).

| | NON | D | W/C |
|---|-----|---|-----|
| 1. Explain the use of equipment. | | | |
| 2. Demonstrate the use of equipment. | | | |
| 3. Teach activity to a group. | | | |
| 4. Teach activity to an individual. | | | |
| 5. Explain activity techniques and methods. | | | |
| 6. Demonstrate activity techniques and methods. | | | |
| 7. Observe students and correct mistakes. | | | |
| 8. Maintain and/or repair equipment. | | | |
| 9. Purchase and/or sell equipment. | | | |
| 10. Coordinate work schedules of personnel. | | | |
| 11. Plan and develop program. | | | |
| 12. Promote program (publicity). | | | |
| 13. Document and complete paperwork in an activity program. | | | |
| 14. Train staff. | | | |
| 15. Evaluate staff. | | | |
| 16. Interpret services to public and participants. | | | |

THANK YOU VERY MUCH FOR PARTICIPATING IN THE STUDY. PLEASE RETURN THE QUESTIONNAIRE TO:

Debbie Alcoultoumre
Box 25444 TWU
Denton, Texas 76204

(If you would like a copy of the results, please include a stamped, self-addressed envelope).

APPENDIX C

DESCRIPTIONS OF RANKS FOR EACH POSITION

Table 59
Description of Ranks for the Position of
Secretary

| Applicants | Number | Percentage |
|-----------------|--------|------------|
| <hr/> | | |
| Nondisabled | | |
| 1st Choice | 65 | 56.5 |
| 2nd Choice | 49 | 42.6 |
| 3rd Choice | 1 | 0.9 |
| Total | 115 | 100.0 |
| Deaf | | |
| 1st Choice | 2 | 1.8 |
| 2nd Choice | 8 | 7.0 |
| 3rd Choice | 105 | 91.2 |
| Total | 115 | 100.0 |
| Wheelchairbound | | |
| 1st Choice | 48 | 41.7 |
| 2nd Choice | 58 | 50.4 |
| 3rd Choice | 9 | 7.9 |
| Total | 115 | 100.0 |

Table 60

Description of Ranks for the Position of
Lifeguard

| Applicants | Number | Percentage |
|-----------------|--------|------------|
| Nondisabled | | |
| 1st Choice | 110 | 97.3 |
| 2nd Choice | 3 | 2.3 |
| 3rd Choice | 0 | 0.0 |
| Total | 119 | 100.0 |
| Deaf | | |
| 1st Choice | 3 | 2.7 |
| 2nd Choice | 93 | 84.5 |
| 3rd Choice | 14 | 12.8 |
| Total | 110 | 100.0 |
| Wheelchairbound | | |
| 1st Choice | 0 | 0.0 |
| 2nd Choice | 14 | 12.7 |
| 3rd Choice | 96 | 87.3 |
| Total | 110 | 100.0 |

Table 61

Description of Ranks for the Position of
Recreation Leader for the General Public

| Applicants | Number | Percentage |
|-----------------|--------|------------|
| <hr/> | | |
| Nondisabled | | |
| 1st Choice | 90 | 78.2 |
| 2nd Choice | 18 | 15.6 |
| 3rd Choice | 7 | 6.1 |
| Total | 115 | 100.0 |
| Deaf | | |
| 1st Choice | 8 | 7.0 |
| 2nd Choice | 43 | 37.4 |
| 3rd Choice | 64 | 55.6 |
| Total | 115 | 100.0 |
| Wheelchairbound | | |
| 1st Choice | 17 | 14.8 |
| 2nd Choice | 54 | 46.9 |
| 3rd Choice | 44 | 38.3 |
| Total | 115 | 100.0 |

Table 62

Description of Ranks for the Position of
Recreation Leader for Special Populations

| Applicants | Number | Percentage |
|-----------------|--------|------------|
| <hr/> | | |
| Nondisabled | | |
| 1st Choice | 33 | 27.7 |
| 2nd Choice | 23 | 19.3 |
| 3rd Choice | 63 | 53.0 |
| Total | 119 | 100.0 |
| Deaf | | |
| 1st Choice | 15 | 12.6 |
| 2nd Choice | 60 | 50.4 |
| 3rd Choice | 44 | 37.0 |
| Total | 119 | 100.0 |
| Wheelchairbound | | |
| 1st Choice | 71 | 59.7 |
| 2nd Choice | 36 | 30.2 |
| 3rd Choice | 12 | 10.1 |
| Total | 119 | 100.0 |

Table 63

Description of Ranks for the Position of
Recreation Facility Attendant

| Applicants | Number | Percentage |
|------------|--------|------------|
|------------|--------|------------|

Nondisabled

| | | |
|------------|-----|-------|
| 1st Choice | 65 | 55.6 |
| 2nd Choice | 26 | 22.2 |
| 3rd Choice | 26 | 22.2 |
| Total | 117 | 100.0 |

Deaf

| | | |
|------------|-----|-------|
| 1st Choice | 18 | 15.4 |
| 2nd Choice | 46 | 39.3 |
| 3rd Choice | 53 | 45.3 |
| Total | 117 | 100.0 |

Wheelchairbound

| | | |
|------------|-----|-------|
| 1st Choice | 34 | 29.0 |
| 2nd Choice | 45 | 38.5 |
| 3rd Choice | 38 | 32.5 |
| Total | 117 | 100.0 |

Table 64

Description of Ranks for the Position of
Recreation Supervisor

| Applicants | Number | Percentage |
|-----------------|--------|------------|
| <hr/> | | |
| Nondisabled | | |
| 1st Choice | 85 | 75.2 |
| 2nd Choice | 21 | 18.6 |
| 3rd Choice | 7 | 6.2 |
| Total | 113 | 100.0 |
| Deaf | | |
| 1st Choice | 6 | 5.3 |
| 2nd Choice | 40 | 35.4 |
| 3rd Choice | 67 | 59.3 |
| Total | 113 | 100.0 |
| Wheelchairbound | | |
| 1st Choice | 22 | 19.5 |
| 2nd Choice | 52 | 46.0 |
| 3rd Choice | 39 | 34.5 |
| Total | 113 | 100.0 |

Table 65

Description of Ranks for the Postion of
Program Director

| Applicants | Number | Percentage |
|-----------------|--------|------------|
| <hr/> | | |
| Nondisabled | | |
| 1st Choice | 65 | 57.0 |
| 2nd Choice | 28 | 24.6 |
| 3rd Choice | 21 | 18.4 |
| Total | 114 | 100.0 |
| Deaf | | |
| 1st Choice | 16 | 14.0 |
| 2nd Choice | 26 | 22.8 |
| 3rd Choice | 72 | 63.2 |
| Total | 114 | 100.0 |
| Wheelchairbound | | |
| 1st Choice | 33 | 29.0 |
| 2nd Choice | 60 | 52.6 |
| 3rd Choice | 21 | 18.4 |
| Total | 114 | 100.0 |

Table 66

Description of Ranks for the Position of
Special Population Coordinator

| Applicants | Number | Percentage |
|-----------------|--------|------------|
| <hr/> | | |
| Nondisabled | | |
| 1st Choice | 35 | 30.7 |
| 2nd Choice | 23 | 20.2 |
| 3rd Choice | 56 | 49.1 |
| Total | 114 | 100.0 |
| Deaf | | |
| 1st Choice | 18 | 15.8 |
| 2nd Choice | 51 | 44.7 |
| 3rd Choice | 45 | 39.5 |
| Total | 114 | 100.0 |
| Wheelchairbound | | |
| 1st Choice | 61 | 53.5 |
| 2nd Choice | 40 | 35.1 |
| 3rd Choice | 13 | 11.4 |
| Total | 114 | 100.0 |

Table 57

Description of Ranks for the Position of
Recreation Superintendant

| Applicants | Number | Percentage |
|-----------------|--------|------------|
| <hr/> | | |
| Nondisabled | | |
| 1st Choice | 86 | 76.1 |
| 2nd Choice | 20 | 17.7 |
| 3rd Choice | 7 | 6.2 |
| Total | 113 | 100.0 |
| Deaf | | |
| 1st Choice | 6 | 5.3 |
| 2nd Choice | 30 | 26.3 |
| 3rd Choice | 77 | 68.1 |
| Total | 113 | 100.0 |
| Wheelchairbound | | |
| 1st Choice | 21 | 18.6 |
| 2nd Choice | 63 | 55.8 |
| 3rd Choice | 29 | 25.6 |
| Total | 113 | 100.0 |

APPENDIX D

RAW DATA

Raw Data-Demographics

| Subjects | Age | Sex | Education | Degree | Disabled Respondent | Family/ Relative | Friend/ Acquaintance | Work Peer | Employee | Consumer | Boss | Interview | ATDP Scores |
|----------|-----|-----|-----------|--------|------------------------|---------------------|-------------------------|-----------|----------|----------|------|-----------|-------------|
| 001 | 4 | 1 | 4 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 129 |
| 002 | 3 | 1 | 3 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 117 |
| 003 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 116 |
| 004 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 128 |
| 005 | 5 | 1 | 4 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 0 | 116 |
| 006 | 2 | 1 | 3 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 105 |
| 007 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 167 |
| 008 | 3 | 1 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 089 |
| 009 | 3 | 0 | 3 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 0 | 140 |
| 010 | 3 | 1 | 3 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 145 |
| 011 | 3 | 1 | 4 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 108 |
| 012 | 5 | 1 | 3 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 109 |
| 013 | 2 | 1 | 3 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 129 |
| 014 | 5 | 1 | 4 | 2 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 129 |
| 015 | 5 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 118 |
| 016 | 3 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 099 |
| 017 | 2 | 2 | 3 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 099 |
| 018 | 0 | 0 | 0 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 133 |

Raw Data-Demographics (Continued)

[illegible]

Raw Data-Demographics (Continued)

| Subjects | Age | Sex | Education | Degree | Disabled Respondent | Family/ Relative | Friend/ Acquaintance | Work Peer | Employee | Consumer | Boss | Interview | ATDP Scores |
|----------|-----|-----|-----------|--------|------------------------|---------------------|-------------------------|-----------|----------|----------|------|-----------|-------------|
| 037 | 3 | 2 | 3 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 142 |
| 038 | 5 | 1 | 4 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 1 | 081 |
| 039 | 3 | 1 | 1 | 0 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 129 |
| 040 | 3 | 1 | 4 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 151 |
| 041 | 4 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 111 |
| 042 | 2 | 1 | 4 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 098 |
| 043 | 3 | 1 | 3 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 2 | 1 | 136 |
| 044 | 3 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 126 |
| 045 | 3 | 0 | 3 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 123 |
| 046 | 4 | 1 | 4 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 000 |
| 047 | 3 | 1 | 3 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 2 | 1 | 099 |
| 048 | 5 | 1 | 3 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 135 |
| 049 | 4 | 0 | 4 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 1 | 152 |
| 050 | 2 | 1 | 5 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 110 |
| 051 | 4 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 129 |
| 052 | 3 | 1 | 4 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 122 |
| 053 | 3 | 1 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 076 |
| 054 | 3 | 1 | 3 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 158 |

Raw Data-Demographics (Continued)

| Subjects | Age | Sex | Education | Degree | Disabled Respondent | Family/ Relative | Friend/ Acquaintance | Work Peer | Employee | Consumer | Boss | Interview | ATDP Scores |
|----------|-----|-----|-----------|--------|------------------------|---------------------|-------------------------|-----------|----------|----------|------|-----------|-------------|
| 055 | 4 | 1 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 096 |
| 056 | 3 | 1 | 3 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 126 |
| 057 | 3 | 1 | 4 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 153 |
| 058 | 2 | 1 | 3 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 142 |
| 059 | 2 | 1 | 3 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 155 |
| 060 | 4 | 1 | 3 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 118 |
| 061 | 3 | 1 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 104 |
| 062 | 4 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 130 |
| 063 | 3 | 1 | 1 | 0 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 118 |
| 064 | 3 | 1 | 4 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 134 |
| 065 | 4 | 1 | 3 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 110 |
| 066 | 6 | 0 | 4 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 143 |
| 067 | 2 | 1 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 107 |
| 068 | 2 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 104 |
| 069 | 3 | 0 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 1 | 144 |
| 070 | 2 | 1 | 3 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 110 |
| 071 | 3 | 2 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 107 |
| 072 | 3 | 1 | 3 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 105 |

Raw Data-Demographics (Continued)

[illegible]

Raw Data-Demographics (Continued)

| Subjects | Age | Sex | Education | Degree | Disabled Respondent | Family/ Relative | Friend/ Acquaintance | Work Peer | Employee | Consumer | Boss | Interview | ATDP Scores |
|----------|-----|-----|-----------|--------|------------------------|---------------------|-------------------------|-----------|----------|----------|------|-----------|-------------|
| 091 | 3 | 1 | 4 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 000 |
| 092 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 108 |
| 093 | 2 | 1 | 3 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 111 |
| 094 | 3 | 0 | 4 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 0 | 097 |
| 095 | 3 | 0 | 3 | 2 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 110 |
| 096 | 3 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 133 |
| 097 | 2 | 1 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 161 |
| 098 | 3 | 1 | 3 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 118 |
| 099 | 6 | 1 | 4 | 1 | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 1 | 088 |
| 100 | 3 | 1 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 121 |
| 101 | 2 | 0 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 117 |
| 102 | 3 | 1 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 133 |
| 103 | 3 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 094 |
| 104 | 6 | 0 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 098 |
| 105 | 5 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 148 |
| 106 | 5 | 1 | 1 | 0 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 124 |
| 107 | 3 | 1 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 095 |
| 108 | 6 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 111 |

Raw Data-Demographics (Continued)

| Subjects | Age | Sex | Education | Degree | Disabled Respondent | Family/ Relative | Friend/ Acquaintance | Work Peer | Employee | Consumer | Boss | Interview | ATDP Scores |
|----------|-----|-----|-----------|--------|------------------------|---------------------|-------------------------|-----------|----------|----------|------|-----------|-------------|
| 109 | 5 | 1 | 3 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 120 |
| 110 | 4 | 1 | 4 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 082 |
| 111 | 3 | 1 | 3 | 2 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 107 |
| 112 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 128 |
| 113 | 3 | 1 | 3 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 116 |
| 114 | 2 | 2 | 4 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 133 |
| 115 | 2 | 0 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 106 |
| 116 | 3 | 1 | 3 | 2 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 124 |
| 117 | 4 | 0 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 104 |
| 118 | 5 | 2 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 081 |
| 119 | 4 | 1 | 3 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 112 |
| 120 | 3 | 1 | 4 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 127 |
| 121 | 4 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 105 |
| 122 | 4 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 122 |
| 123 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 133 |
| 124 | 3 | 2 | 4 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 2 | 1 | 132 |
| 125 | 2 | 1 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 115 |
| 126 | 3 | 1 | 3 | 1 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 144 |

Raw Data-Demographics (Continued)

| Subjects | Age | Sex | Education | Degree | Disabled Respondent | Family/ Relative | Friend/ Acquaintance | Work Peer | Employee | Consumer | Boss | Interview | ATDP Scores |
|----------|-----|-----|-----------|--------|------------------------|---------------------|-------------------------|-----------|----------|----------|------|-----------|-------------|
| 127 | 4 | 2 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 136 |
| 128 | 3 | 1 | 3 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 064 |
| 129 | 4 | 2 | 4 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 131 |
| 130 | 5 | 2 | 3 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 152 |

Raw Data-Rankings of Positions

| Subjects | Secretary | Lifeguard | Recreation Leader, GP | Recreation Leader, SP | Rec. Facility Attendant | Recreation Supervisor | Program Director | Spec. Pop. Coordinator | Recreation Superintendent |
|----------|-----------|-----------|--------------------------|--------------------------|----------------------------|--------------------------|---------------------|---------------------------|------------------------------|
| 001 | 231 | 123 | 321 | 321 | 321 | 132 | 132 | 312 | 321 |
| 002 | 132 | 123 | 123 | 312 | 132 | 123 | 123 | 213 | 123 |
| 003 | 132 | 123 | 132 | 132 | 132 | 132 | 132 | 132 | 132 |
| 005 | 231 | 123 | 123 | 321 | 321 | 132 | 132 | 321 | 132 |
| 006 | 231 | 123 | 132 | 132 | 132 | 132 | 231 | 231 | 132 |
| 007 | 123 | 123 | 123 | 231 | 213 | 123 | 231 | 132 | 123 |
| 008 | 231 | 123 | 123 | 321 | 231 | 312 | 123 | 321 | 123 |
| 009 | 132 | 100 | 123 | 321 | 132 | 132 | 132 | 321 | 132 |
| 010 | 231 | 123 | 123 | 321 | 132 | 123 | 213 | 321 | 132 |
| 011 | 231 | 123 | 132 | 321 | 321 | 132 | 132 | 231 | 132 |
| 012 | 132 | 123 | 132 | 231 | 231 | 231 | 321 | 321 | 132 |
| 013 | 231 | 123 | 132 | 312 | 231 | 123 | 312 | 321 | 132 |
| 015 | 132 | 123 | 132 | 132 | 132 | 123 | 132 | 132 | 132 |
| 017 | 132 | 100 | 132 | 231 | 132 | 132 | 231 | 312 | 231 |
| 018 | 231 | 123 | 132 | 321 | 123 | 123 | 321 | 231 | 312 |
| 019 | 132 | 123 | 132 | 321 | 123 | 132 | 132 | 132 | 132 |
| 020 | 132 | 123 | 132 | 321 | 231 | 132 | 132 | 321 | 132 |
| 021 | 132 | 132 | 132 | 321 | 132 | 132 | 132 | 321 | 132 |

Raw Data-Rankings for Positions (Continued)

| Subjects | Secretary | Lifeguard | Recreation Leader, GP | Recreation Leader, SP | Rec. Facility Attendant | Recreation Supervisor | Program Director | Spec. Pop. Coordinator | Recreation Superintendent |
|----------|-----------|-----------|--------------------------|--------------------------|----------------------------|--------------------------|---------------------|---------------------------|------------------------------|
| 022 | 132 | 132 | 123 | 321 | 123 | 132 | 312 | 321 | 132 |
| 023 | 132 | 132 | 132 | 321 | 123 | 123 | 132 | 321 | 132 |
| 024 | 231 | 123 | 123 | 231 | 231 | 231 | 231 | 132 | 132 |
| 025 | 132 | 100 | 132 | 321 | 231 | 132 | 132 | 231 | 132 |
| 026 | 132 | 100 | 132 | 231 | 231 | 123 | 321 | 312 | 132 |
| 027 | 231 | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132 |
| 028 | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132 |
| 030 | 132 | 123 | 231 | 312 | 312 | 132 | 132 | 312 | 132 |
| 031 | 123 | 123 | 123 | 123 | 213 | 123 | 231 | 213 | 123 |
| 032 | 000 | 123 | 000 | 321 | 321 | 321 | 213 | 321 | 123 |
| 033 | 123 | 123 | 312 | 312 | 321 | 123 | 312 | 123 | 123 |
| 035 | 321 | 123 | 321 | 321 | 132 | 321 | 321 | 321 | 231 |
| 036 | 231 | 123 | 123 | 123 | 123 | 123 | 213 | 000 | 231 |
| 037 | 231 | 123 | 123 | 231 | 123 | 132 | 132 | 321 | 132 |
| 038 | 231 | 123 | 132 | 321 | 132 | 132 | 123 | 321 | 132 |
| 039 | 231 | 123 | 123 | 231 | 123 | 231 | 231 | 231 | 132 |
| 040 | 231 | 123 | 123 | 321 | 231 | 132 | 231 | 321 | 231 |
| 041 | 213 | 123 | 231 | 321 | 123 | 213 | 321 | 312 | 123 |

Raw Data-Rankings for Positions (Continued)

| Subjects | Secretary | Lifeguard | Recreation Leader, GP | Recreation Leader, SP | Rec. Facility Attendant | Recreation Supervisor | Program Director | Spec. Pop. Coordinator | Recreation Superintendent |
|----------|-----------|-----------|--------------------------|--------------------------|----------------------------|--------------------------|---------------------|---------------------------|------------------------------|
| 042 | 000 | 123 | 123 | 321 | 231 | 123 | 132 | 231 | 132 |
| 044 | 132 | 123 | 123 | 312 | 321 | 132 | 231 | 321 | 132 |
| 045 | 132 | 123 | 132 | 321 | 231 | 231 | 231 | 231 | 231 |
| 047 | 132 | 123 | 132 | 231 | 213 | 231 | 132 | 321 | 132 |
| 048 | 132 | 123 | 231 | 132 | 312 | 213 | 321 | 321 | 213 |
| 049 | 132 | 123 | 132 | 231 | 231 | 123 | 132 | 132 | 132 |
| 050 | 231 | 123 | 132 | 231 | 132 | 231 | 132 | 231 | 231 |
| 051 | 132 | 123 | 132 | 132 | 132 | 000 | 132 | 231 | 132 |
| 053 | 231 | 123 | 123 | 231 | 132 | 231 | 231 | 321 | 132 |
| 054 | 231 | 123 | 312 | 321 | 321 | 312 | 312 | 321 | 321 |
| 055 | 132 | 123 | 132 | 132 | 132 | 123 | 123 | 123 | 123 |
| 056 | 132 | 123 | 132 | 132 | 132 | 123 | 231 | 231 | 231 |
| 057 | 231 | 123 | 132 | 312 | 321 | 123 | 231 | 231 | 123 |
| 058 | 132 | 123 | 123 | 123 | 132 | 132 | 132 | 132 | 132 |
| 059 | 000 | 123 | 123 | 321 | 213 | 123 | 000 | 312 | 231 |
| 060 | 213 | 213 | 213 | 213 | 123 | 213 | 213 | 123 | 213 |
| 061 | 132 | 123 | 000 | 321 | 132 | 213 | 123 | 321 | 132 |
| 062 | 231 | 123 | 132 | 132 | 321 | 132 | 231 | 321 | 123 |

Raw Data-Rankings for Positions (Continued)

| Subjects | Secretary | Lifeguard | Recreation Leader, GP | Recreation Leader, SP | Rec. Facility Attendant | Recreation Supervisor | Program Director | Spec. Pop. Coordinator | Recreation Superintendent |
|----------|-----------|-----------|--------------------------|--------------------------|----------------------------|--------------------------|---------------------|---------------------------|------------------------------|
| 063 | 231 | 123 | 132 | 312 | 123 | 132 | 123 | 212 | 123 |
| 065 | 231 | 123 | 123 | 132 | 123 | 231 | 132 | 321 | 132 |
| 067 | 132 | 123 | 123 | 321 | 132 | 123 | 231 | 132 | 132 |
| 069 | 231 | 123 | 132 | 321 | 321 | 132 | 132 | 321 | 132 |
| 070 | 132 | 100 | 132 | 231 | 132 | 132 | 132 | 231 | 132 |
| 071 | 132 | 123 | 132 | 231 | 132 | 132 | 123 | 321 | 132 |
| 072 | 132 | 123 | 123 | 132 | 132 | 132 | 132 | 132 | 132 |
| 073 | 132 | 123 | 132 | 321 | 123 | 123 | 123 | 123 | 123 |
| 074 | 231 | 123 | 321 | 312 | 312 | 321 | 312 | 321 | 213 |
| 075 | 231 | 132 | 000 | 321 | 132 | 132 | 312 | 312 | 132 |
| 076 | 132 | 123 | 231 | 213 | 312 | 132 | 231 | 312 | 231 |
| 078 | 132 | 213 | 123 | 123 | 123 | 123 | 123 | 231 | 123 |
| 079 | 132 | 123 | 132 | 231 | 123 | 132 | 132 | 321 | 132 |
| 080 | 231 | 132 | 213 | 321 | 231 | 231 | 312 | 321 | 321 |
| 081 | 132 | 123 | 132 | 132 | 123 | 132 | 132 | 132 | 132 |
| 082 | 231 | 123 | 321 | 312 | 312 | 321 | 312 | 312 | 321 |
| 083 | 231 | 123 | 132 | 312 | 123 | 132 | 132 | 321 | 132 |
| 084 | 132 | 123 | 132 | 123 | 123 | 123 | 123 | 123 | 123 |

Raw Data-Rankings for Positions (Continued)

| Subjects | Secretary | Lifeguard | Recreation Leader, GP | Recreation Leader, SP | Rec. Facility Attendant | Recreation Supervisor | Program Director | Spec. Pop. Coordinator | Recreation Superintendent |
|----------|-----------|-----------|--------------------------|--------------------------|----------------------------|--------------------------|---------------------|---------------------------|------------------------------|
| 085 | 231 | 123 | 123 | 321 | 123 | 123 | 123 | 321 | 123 |
| 086 | 231 | 123 | 132 | 231 | 231 | 231 | 132 | 321 | 132 |
| 087 | 132 | 123 | 231 | 000 | 132 | 132 | 231 | 000 | 132 |
| 088 | 123 | 123 | 123 | 132 | 123 | 123 | 132 | 132 | 132 |
| 089 | 231 | 132 | 231 | 132 | 312 | 231 | 231 | 132 | 213 |
| 090 | 231 | 132 | 231 | 132 | 312 | 231 | 231 | 132 | 231 |
| 091 | 132 | 100 | 123 | 123 | 132 | 132 | 132 | 132 | 132 |
| 093 | 132 | 123 | 132 | 321 | 213 | 132 | 231 | 221 | 132 |
| 094 | 123 | 213 | 123 | 321 | 321 | 123 | 123 | 231 | 123 |
| 095 | 231 | 123 | 132 | 231 | 123 | 123 | 231 | 231 | 231 |
| 096 | 132 | 123 | 213 | 132 | 321 | 132 | 231 | 132 | 231 |
| 097 | 231 | 123 | 123 | 321 | 231 | 123 | 312 | 312 | 123 |
| 098 | 123 | 132 | 123 | 321 | 321 | 132 | 321 | 321 | 231 |
| 099 | 132 | 123 | 123 | 123 | 231 | 123 | 123 | 123 | 123 |
| 100 | 231 | 123 | 132 | 321 | 213 | 231 | 132 | 321 | 132 |
| 101 | 132 | 100 | 132 | 132 | 123 | 132 | 132 | 132 | 132 |
| 102 | 231 | 123 | 123 | 312 | 312 | 123 | 123 | 321 | 123 |
| 103 | 231 | 123 | 132 | 231 | 312 | 132 | 132 | 231 | 132 |

Raw Data-Rankings for Positions (Continued)

| Subjects | Secretary | Lifeguard | Recreation Leader, GP | Recreation Leader, SP | Rec. Facility Attendant | Recreation Supervisor | Program Director | Spec. Pop. Coordinator | Recreation Superintendent |
|----------|-----------|-----------|--------------------------|--------------------------|----------------------------|--------------------------|---------------------|---------------------------|------------------------------|
| 104 | 132 | 123 | 132 | 123 | 132 | 000 | 132 | 123 | 132 |
| 106 | 231 | 123 | 123 | 321 | 321 | 321 | 321 | 321 | 321 |
| 107 | 132 | 123 | 132 | 132 | 132 | 132 | 132 | 132 | 132 |
| 109 | 132 | 123 | 132 | 321 | 123 | 123 | 132 | 321 | 132 |
| 110 | 123 | 123 | 123 | 132 | 132 | 132 | 132 | 132 | 132 |
| 111 | 132 | 000 | 231 | 321 | 231 | 132 | 231 | 321 | 030 |
| 112 | 231 | 100 | 123 | 321 | 123 | 231 | 321 | 123 | 123 |
| 113 | 132 | 123 | 213 | 321 | 312 | 231 | 132 | 312 | 231 |
| 114 | 231 | 132 | 132 | 231 | 231 | 132 | 231 | 132 | 132 |
| 115 | 132 | 123 | 132 | 132 | 123 | 132 | 132 | 123 | 132 |
| 116 | 132 | 123 | 000 | 321 | 123 | 123 | 123 | 312 | 123 |
| 117 | 132 | 132 | 123 | 123 | 123 | 123 | 132 | 132 | 132 |
| 118 | 132 | 123 | 123 | 132 | 123 | 132 | 132 | 132 | 123 |
| 119 | 231 | 123 | 231 | 123 | 132 | 123 | 123 | 231 | 321 |
| 120 | 132 | 123 | 213 | 321 | 231 | 132 | 312 | 321 | 132 |
| 121 | 132 | 132 | 132 | 321 | 132 | 132 | 132 | 312 | 132 |
| 122 | 231 | 123 | 132 | 321 | 132 | 132 | 132 | 321 | 132 |
| 123 | 132 | 123 | 132 | 132 | 132 | 132 | 132 | 132 | 132 |

Raw Data-Rankings for Positions (Continued)

| Subjects | Secretary | Lifeguard | Recreation Leader, GP | Recreation Leader, SP | Rec. Facility Attendant | Recreation Supervisor | Program Director | Spec. Pop. Coordinator | Recreation Superintendent |
|----------|-----------|-----------|--------------------------|--------------------------|----------------------------|--------------------------|---------------------|---------------------------|------------------------------|
| 124 | 132 | 123 | 123 | 321 | 123 | 123 | 312 | 321 | 123 |
| 125 | 132 | 123 | 312 | 312 | 321 | 132 | 123 | 321 | 231 |
| 126 | 231 | 123 | 231 | 321 | 132 | 231 | 132 | 321 | 213 |
| 128 | 000 | 123 | 123 | 231 | 213 | 123 | 132 | 321 | 132 |
| 129 | 231 | 123 | 123 | 312 | 123 | 123 | 312 | 312 | 123 |
| 130 | 132 | 123 | 123 | 132 | 213 | 231 | 132 | 132 | 132 |

- 1st number in each column is nondisabled
- 2nd number in each column is deaf
- 3rd number in each column is wheelchairbound

Raw Data - Job Functions

| Subjects | Demonstrate Rec. Equip. | Teach Activity to Group | Teach Activity to Individual | Explain Tech. & Methods | Demo. Tech. & Methods | Observe & Correct | Maintain/ Repair | Purchase/ Sell |
|----------|----------------------------|----------------------------|---------------------------------|----------------------------|--------------------------|----------------------|---------------------|-------------------|
| 001 | 112 | 111 | 111 | 121 | 111 | 111 | 112 | 121 |
| 002 | 111 | 121 | 111 | 121 | 111 | 121 | 111 | 121 |
| 003 | 111 | 121 | 121 | 121 | 121 | 111 | 111 | 121 |
| 004 | 121 | 121 | 121 | 121 | 121 | 111 | 111 | 111 |
| 005 | 111 | 121 | 111 | 121 | 121 | 111 | 111 | 111 |
| 006 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 007 | 111 | 111 | 111 | 111 | 111 | 111 | 112 | 111 |
| 008 | 112 | 112 | 111 | 112 | 112 | 121 | 111 | 111 |
| 009 | 112 | 111 | 111 | 111 | 112 | 111 | 111 | 111 |
| 010 | 112 | 112 | 112 | 121 | 112 | 111 | 111 | 121 |
| 011 | 121 | 111 | 111 | 112 | 112 | 111 | 121 | 111 |
| 012 | 111 | 121 | 121 | 121 | 111 | 121 | 111 | 111 |
| 013 | 112 | 121 | 111 | 121 | 112 | 111 | 111 | 121 |
| 014 | 111 | 121 | 111 | 121 | 121 | 121 | 111 | 111 |
| 015 | 112 | 111 | 111 | 121 | 112 | 111 | 111 | 111 |
| 016 | 122 | 121 | 121 | 121 | 122 | 121 | 111 | 121 |
| 017 | 112 | 121 | 121 | 121 | 111 | 112 | 111 | 121 |
| 018 | 112 | 112 | 111 | 111 | 112 | 111 | 111 | 121 |

Raw Data - Job Functions (Continued)

| Subjects | Demonstrate Rec. Equip. | Teach Activity to Group | Teach Activity to Individual | Explain Tech. & Methods | Demo. Tech. & Methods | Observe & Correct | Maintain/ Repair | Purchase/ Sell |
|----------|----------------------------|----------------------------|---------------------------------|----------------------------|--------------------------|----------------------|---------------------|-------------------|
| 019 | 112 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 020 | 112 | 121 | 121 | 121 | 112 | 111 | 111 | 121 |
| 021 | 111 | 121 | 121 | 121 | 121 | 111 | 111 | 111 |
| 022 | 112 | 112 | 111 | 121 | 122 | 111 | 111 | 111 |
| 023 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 025 | 112 | 111 | 111 | 121 | 122 | 121 | 111 | 111 |
| 026 | 121 | 121 | 111 | 121 | 111 | 111 | 111 | 111 |
| 027 | 111 | 121 | 111 | 111 | 112 | 111 | 111 | 121 |
| 028 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 121 |
| 029 | 112 | 111 | 111 | 111 | 111 | 111 | 112 | 111 |
| 030 | 111 | 111 | 111 | 111 | 111 | 111 | 112 | 111 |
| 031 | 122 | 121 | 111 | 121 | 112 | 121 | 111 | 121 |
| 032 | 111 | 111 | 111 | 122 | 121 | 111 | 111 | 111 |
| 033 | 112 | 111 | 111 | 112 | 112 | 111 | 111 | 111 |
| 034 | 111 | 111 | 111 | 121 | 111 | 111 | 111 | 111 |
| 035 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 036 | 112 | 112 | 112 | 111 | 112 | 111 | 111 | 111 |
| 037 | 111 | 111 | 111 | 121 | 111 | 111 | 111 | 121 |

Raw Data - Job Functions (Continued)

| Subjects | Demonstrate Rec. Equip. | Teach Activity to Group | Teach Activity to Individual | Explain Tech. & Methods | Demo. Tech. & Methods | Observe & Correct | Maintain/ Repair | Purchase/ Sell |
|----------|----------------------------|----------------------------|---------------------------------|----------------------------|--------------------------|----------------------|---------------------|-------------------|
| 038 | 111 | 111 | 111 | 121 | 112 | 111 | 111 | 111 |
| 039 | 112 | 111 | 111 | 111 | 112 | 111 | 112 | 111 |
| 040 | 121 | 111 | 111 | 111 | 111 | 111 | 111 | 121 |
| 041 | 112 | 111 | 112 | 111 | 112 | 111 | 112 | 111 |
| 042 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 043 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 121 |
| 044 | 111 | 121 | 111 | 121 | 111 | 111 | 111 | 111 |
| 045 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 046 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 047 | 112 | 121 | 111 | 121 | 112 | 111 | 112 | 121 |
| 048 | 111 | 111 | 111 | 111 | 112 | 111 | 111 | 111 |
| 049 | 111 | 121 | 111 | 121 | 112 | 111 | 111 | 121 |
| 050 | 112 | 121 | 111 | 121 | 112 | 121 | 112 | 121 |
| 051 | 122 | 112 | 111 | 111 | 112 | 111 | 111 | 121 |
| 052 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 053 | 112 | 121 | 121 | 121 | 122 | 121 | 112 | 121 |
| 054 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 055 | 112 | 122 | 122 | 121 | 121 | 121 | 112 | 121 |

Raw Data - Job Functions (Continued)

| Subjects | Demonstrate Rec. Equip. | Teach Activity to Group | Teach Activity to Individual | Explain Tech. & Methods | Demo. Tech. & Methods | Observe & Correct | Maintain/ Repair | Purchase/ Sell |
|----------|----------------------------|----------------------------|---------------------------------|----------------------------|--------------------------|----------------------|---------------------|-------------------|
| 056 | 112 | 111 | 121 | 111 | 112 | 121 | 111 | 121 |
| 057 | 112 | 111 | 111 | 121 | 111 | 111 | 111 | 111 |
| 058 | 112 | 111 | 111 | 111 | 112 | 111 | 111 | 111 |
| 059 | 112 | 112 | 112 | 211 | 112 | 112 | 111 | 211 |
| 061 | 111 | 112 | 111 | 111 | 112 | 111 | 112 | 121 |
| 062 | 112 | 111 | 111 | 111 | 111 | 111 | 121 | 111 |
| 063 | 112 | 112 | 111 | 122 | 112 | 111 | 112 | 111 |
| 064 | 111 | 111 | 111 | 121 | 111 | 111 | 111 | 111 |
| 065 | 112 | 111 | 111 | 121 | 111 | 111 | 111 | 111 |
| 066 | 112 | 111 | 111 | 111 | 112 | 111 | 111 | 111 |
| 067 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 068 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 069 | 111 | 121 | 121 | 121 | 111 | 111 | 112 | 121 |
| 070 | 111 | 121 | 111 | 121 | 121 | 111 | 111 | 111 |
| 071 | 111 | 111 | 111 | 121 | 111 | 111 | 111 | 121 |
| 072 | 111 | 121 | 111 | 111 | 111 | 111 | 111 | 121 |
| 073 | 122 | 122 | 111 | 122 | 112 | 111 | 112 | 111 |
| 074 | 111 | 112 | 111 | 111 | 112 | 111 | 112 | 111 |

Raw Data - Job Functions (Continued)

| Subjects | Demonstrate Rec. Equip. | Teach Activity to Group | Teach Activity to Individual | Explain Tech. & Methods | Demo. Tech. & Methods | Observe & Correct | Maintain/ Repair | Purchase/ Sell |
|----------|----------------------------|----------------------------|---------------------------------|----------------------------|--------------------------|----------------------|---------------------|-------------------|
| 056 | 112 | 111 | 121 | 111 | 112 | 121 | 111 | 121 |
| 057 | 112 | 111 | 111 | 121 | 111 | 111 | 111 | 111 |
| 058 | 112 | 111 | 111 | 111 | 112 | 111 | 111 | 111 |
| 059 | 112 | 112 | 112 | 211 | 112 | 112 | 111 | 211 |
| 061 | 111 | 112 | 111 | 111 | 112 | 111 | 112 | 121 |
| 062 | 112 | 111 | 111 | 111 | 111 | 111 | 121 | 111 |
| 063 | 112 | 112 | 111 | 122 | 112 | 111 | 112 | 111 |
| 064 | 111 | 111 | 111 | 121 | 111 | 111 | 111 | 111 |
| 065 | 112 | 111 | 111 | 121 | 111 | 111 | 111 | 111 |
| 066 | 112 | 111 | 111 | 111 | 112 | 111 | 111 | 111 |
| 067 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 068 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 069 | 111 | 121 | 121 | 121 | 111 | 111 | 112 | 121 |
| 070 | 111 | 121 | 111 | 121 | 121 | 111 | 111 | 111 |
| 071 | 111 | 111 | 111 | 121 | 111 | 111 | 111 | 121 |
| 072 | 111 | 121 | 111 | 111 | 111 | 111 | 111 | 121 |
| 073 | 122 | 122 | 111 | 122 | 112 | 111 | 112 | 111 |
| 074 | 111 | 112 | 111 | 111 | 112 | 111 | 112 | 111 |

Raw Data - Job Functions (Continued)

| Subjects | | | | | | | | |
|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| Demonstrate Rec. Equip. | 075 | 112 | 121 | 111 | 111 | 121 | 111 | 111 |
| | 076 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| | 077 | 111 | 111 | 121 | 121 | 121 | 111 | 112 |
| | 078 | 111 | 121 | 112 | 121 | 121 | 111 | 111 |
| | 079 | 112 | 112 | 111 | 112 | 112 | 111 | 111 |
| | 080 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| | 081 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| | 082 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| | 083 | 112 | 121 | 111 | 121 | 111 | 111 | 111 |
| | 084 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| | 085 | 112 | 121 | 121 | 121 | 112 | 121 | 121 |
| | 086 | 122 | 122 | 122 | 121 | 122 | 112 | 122 |
| | 087 | 112 | 121 | 111 | 121 | 122 | 111 | 111 |
| | 088 | 112 | 111 | 111 | 121 | 122 | 111 | 112 |
| | 089 | 121 | 121 | 121 | 121 | 121 | 111 | 121 |
| | 090 | 121 | 121 | 121 | 121 | 121 | 111 | 121 |
| | 091 | 112 | 122 | 122 | 121 | 122 | 111 | 121 |
| | 092 | 122 | 122 | 122 | 121 | 122 | 111 | 121 |
| Teach Activity to Group | | | | | | | | |
| Teach Activity to Individual | | | | | | | | |
| Explain Tech. & Methods | | | | | | | | |
| Demo. Tech. & Methods | | | | | | | | |
| Observe & Correct | | | | | | | | |
| Maintain/ Repair | | | | | | | | |
| Purchase/ Sell | | | | | | | | |

Raw Data - Job Functions (Continued)

| Subjects | Demonstrate Rec. Equip. | Teach Activity to Group | Teach Activity to Individual | Explain Tech & Methods | Demo. Tech. & Methods | Observe & Correct | Maintain/ Repair | Purchase/ Sell |
|----------|----------------------------|----------------------------|---------------------------------|---------------------------|--------------------------|----------------------|---------------------|-------------------|
| 093 | 111 | 121 | 111 | 121 | 112 | 121 | 112 | 121 |
| 094 | 112 | 111 | 111 | 111 | 112 | 111 | 111 | 121 |
| 095 | 112 | 121 | 121 | 121 | 111 | 111 | 111 | 111 |
| 096 | 121 | 121 | 121 | 121 | 121 | 111 | 111 | 121 |
| 097 | 111 | 121 | 121 | 121 | 112 | 111 | 111 | 121 |
| 098 | 112 | 122 | 122 | 121 | 112 | 111 | 112 | 111 |
| 099 | 122 | 122 | 122 | 122 | 122 | 121 | 111 | 111 |
| 100 | 112 | 121 | 111 | 121 | 112 | 121 | 111 | 111 |
| 101 | 111 | 121 | 121 | 121 | 112 | 111 | 111 | 121 |
| 102 | 122 | 111 | 111 | 111 | 121 | 111 | 111 | 111 |
| 103 | 112 | 122 | 111 | 121 | 122 | 111 | 112 | 121 |
| 104 | 111 | 111 | 121 | 121 | 112 | 111 | 112 | 111 |
| 105 | 122 | 221 | 212 | 122 | 121 | 221 | 121 | 221 |
| 106 | 111 | 111 | 121 | 111 | 111 | 111 | 111 | 111 |
| 107 | 122 | 112 | 112 | 112 | 112 | 121 | 112 | 121 |
| 108 | 122 | 222 | 212 | 221 | 122 | 211 | 212 | 221 |
| 109 | 111 | 121 | 111 | 121 | 112 | 111 | 111 | 111 |
| 110 | 112 | 121 | 121 | 121 | 112 | 111 | 111 | 111 |

Raw Data - Job Functions (Continued)

| Subjects | Demonstrate Rec. Equip. | Teach Activity to Group | Teach Activity to Individual | Explain Tech & Methods | Demo. Tech. & Methods | Observe & Correct | Maintain/ Repair | Purchase/ Sell |
|----------|----------------------------|----------------------------|---------------------------------|---------------------------|--------------------------|----------------------|---------------------|-------------------|
| 128 | 121 | 121 | 112 | 121 | 121 | 121 | 112 | 111 |
| 129 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 130 | 111 | 111 | 111 | 111 | 111 | 112 | 111 | 111 |

-1 is able to perform Job function
 -2 is not able to perform Job function

-1st column is nondisabled
 -2nd column is deaf
 -3rd column is wheelchairbound

Raw Data-Job Functions

| Subjects | Coor. Work Schedules | Plan/Develop Program | Promote Program | Document/ Paperwork | Train Staff | Evaluate Staff | Interpret Services |
|----------|-------------------------|-------------------------|--------------------|------------------------|-------------|-------------------|-----------------------|
| 001 | 111 | 111 | 121 | 111 | 121 | 111 | 121 |
| 002 | 111 | 111 | 121 | 111 | 111 | 111 | 121 |
| 003 | 111 | 111 | 121 | 111 | 121 | 111 | 121 |
| 004 | 111 | 121 | 111 | 111 | 121 | 111 | 121 |
| 005 | 111 | 111 | 111 | 111 | 121 | 121 | 121 |
| 006 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 007 | 111 | 111 | 111 | 111 | 122 | 111 | 122 |
| 008 | 111 | 111 | 121 | 111 | 111 | 121 | 121 |
| 009 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 010 | 111 | 111 | 121 | 111 | 121 | 111 | 121 |
| 011 | 111 | 111 | 112 | 111 | 111 | 111 | 121 |
| 012 | 111 | 121 | 121 | 111 | 121 | 111 | 121 |
| 013 | 111 | 111 | 111 | 111 | 111 | 111 | 121 |
| 014 | 111 | 111 | 121 | 111 | 111 | 111 | 111 |
| 015 | 111 | 111 | 111 | 111 | 111 | 111 | 121 |
| 016 | 111 | 111 | 121 | 111 | 121 | 111 | 121 |
| 017 | 111 | 111 | 121 | 111 | 121 | 111 | 121 |
| 018 | 111 | 111 | 121 | 111 | 121 | 111 | 121 |

Raw Data - Job Functions (Continued)

| Subjects | Demonstrate Rec. Equip. | Teach Activity to Group | Teach Activity to Individual | Explain Tech. & Methods | Demo. Tech. & Methods | Observe & Correct | Maintain/ Repair | Purchase/ Sell |
|----------|----------------------------|----------------------------|---------------------------------|----------------------------|--------------------------|----------------------|---------------------|-------------------|
| 111 | 111 | 121 | 121 | 121 | 111 | 111 | 111 | 121 |
| 112 | 112 | 111 | 111 | 111 | 112 | 111 | 122 | 111 |
| 113 | 112 | 111 | 111 | 121 | 112 | 111 | 112 | 121 |
| 114 | 111 | 121 | 121 | 121 | 121 | 111 | 111 | 111 |
| 115 | 112 | 121 | 111 | 121 | 112 | 121 | 111 | 121 |
| 116 | 112 | 111 | 111 | 111 | 111 | 111 | 112 | 111 |
| 117 | 121 | 121 | 122 | 121 | 111 | 111 | 111 | 122 |
| 118 | 111 | 111 | 111 | 112 | 112 | 112 | 111 | 111 |
| 119 | 112 | 112 | 112 | 121 | 121 | 112 | 121 | 121 |
| 120 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 121 | 112 | 121 | 111 | 121 | 112 | 121 | 111 | 121 |
| 122 | 111 | 121 | 121 | 121 | 111 | 121 | 111 | 121 |
| 123 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 124 | 112 | 121 | 121 | 121 | 121 | 111 | 111 | 111 |
| 125 | 111 | 111 | 111 | 111 | 111 | 112 | 112 | 111 |
| 126 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 127 | 112 | 111 | 111 | 111 | 112 | 111 | 111 | 111 |

Raw Data-Job Functions (Continued)

| Subjects | Coor. Work Schedules | Plan/Develop Program | Promote Program | Document/ Paperwork | Train Staff | Evaluate Staff | Interpret Services |
|----------|-------------------------|-------------------------|--------------------|------------------------|-------------|-------------------|-----------------------|
| 019 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 020 | 111 | 111 | 111 | 111 | 121 | 111 | 111 |
| 021 | 111 | 111 | 111 | 111 | 121 | 111 | 121 |
| 022 | 111 | 111 | 121 | 111 | 111 | 111 | 121 |
| 023 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 025 | 121 | 111 | 111 | 111 | 121 | 121 | 111 |
| 026 | 121 | 111 | 111 | 111 | 121 | 121 | 111 |
| 027 | 111 | 111 | 111 | 111 | 121 | 111 | 111 |
| 028 | 111 | 111 | 121 | 111 | 111 | 111 | 111 |
| 029 | 111 | 111 | 121 | 111 | 121 | 111 | 111 |
| 030 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 031 | 111 | 111 | 121 | 111 | 121 | 111 | 121 |
| 032 | 111 | 111 | 111 | 111 | 111 | 111 | 121 |
| 033 | 121 | 111 | 111 | 112 | 112 | 111 | 111 |
| 034 | 111 | 111 | 111 | 111 | 111 | 111 | 121 |
| 035 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 036 | 111 | 111 | 121 | 111 | 111 | 111 | 121 |
| 037 | 111 | 111 | 111 | 111 | 121 | 111 | 121 |

Raw Data-Job Functions (Continued)

| Subjects | Coor. Work Schedules | Plan/Develop Program | Promote Program | Document/ Paperwork | Train Staff | Evaluate Staff | Interpret Services |
|----------|-------------------------|-------------------------|--------------------|------------------------|-------------|-------------------|-----------------------|
| 038 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 039 | 111 | 111 | 121 | 111 | 111 | 111 | 111 |
| 040 | 111 | 111 | 111 | 111 | 121 | 111 | 121 |
| 041 | 111 | 111 | 111 | 111 | 112 | 111 | 111 |
| 042 | 111 | 111 | 111 | 111 | 121 | 111 | 121 |
| 043 | 111 | 111 | 121 | 111 | 111 | 111 | 111 |
| 044 | 111 | 111 | 121 | 111 | 121 | 111 | 121 |
| 045 | 111 | 111 | 111 | 111 | 111 | 111 | 121 |
| 046 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 047 | 111 | 111 | 111 | 111 | 121 | 121 | 121 |
| 048 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 049 | 111 | 111 | 121 | 111 | 121 | 111 | 121 |
| 050 | 111 | 111 | 121 | 111 | 121 | 111 | 121 |
| 051 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 052 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 053 | 111 | 111 | 121 | 111 | 121 | 111 | 121 |
| 054 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 055 | 121 | 121 | 121 | 111 | 121 | 121 | 121 |

Raw Data-Job Functions (Continued)

| Subjects | Coor. Work Schedules | Plan/Develop Program | Promote Program | Document/ Paperwork | Train Staff | Evaluate Staff | Interpret Services |
|----------|-------------------------|-------------------------|--------------------|------------------------|-------------|-------------------|-----------------------|
| 056 | 111 | 111 | 111 | 111 | 121 | 111 | 121 |
| 057 | 111 | 111 | 111 | 111 | 121 | 111 | 121 |
| 058 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 059 | 211 | 211 | 121 | 111 | 121 | 121 | 121 |
| 061 | 111 | 111 | 111 | 111 | 111 | 111 | 121 |
| 062 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 063 | 111 | 111 | 111 | 111 | 112 | 111 | 121 |
| 064 | 111 | 111 | 111 | 111 | 111 | 111 | 121 |
| 065 | 111 | 111 | 111 | 111 | 111 | 111 | 121 |
| 066 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 067 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 068 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 069 | 111 | 111 | 111 | 111 | 121 | 111 | 121 |
| 070 | 111 | 111 | 111 | 111 | 121 | 121 | 111 |
| 071 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 072 | 111 | 111 | 121 | 111 | 121 | 111 | 121 |
| 073 | 111 | 111 | 111 | 111 | 111 | 111 | 121 |
| 074 | 111 | 111 | 111 | 111 | 111 | 111 | 121 |

Raw Data-Job Functions (Continued)

| Subjects | Coor. Work Schedules | Plan/Develop Program | Promote Program | Document/ Paperwork | Train Staff | Evaluate Staff | Interpret Services |
|----------|-------------------------|-------------------------|--------------------|------------------------|-------------|-------------------|-----------------------|
| 075 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 076 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 077 | 111 | 111 | 111 | 111 | 121 | 111 | 121 |
| 078 | 111 | 121 | 121 | 111 | 121 | 111 | 121 |
| 079 | 111 | 111 | 111 | 111 | 122 | 121 | 122 |
| 080 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 081 | 111 | 111 | 111 | 111 | 121 | 111 | 121 |
| 082 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 083 | 111 | 111 | 121 | 111 | 121 | 111 | 121 |
| 084 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 085 | 121 | 121 | 121 | 121 | 121 | 121 | 121 |
| 086 | 111 | 111 | 121 | 111 | 122 | 111 | 122 |
| 087 | 111 | 111 | 121 | 111 | 121 | 111 | 121 |
| 088 | 121 | 121 | 121 | 121 | 122 | 121 | 121 |
| 089 | 111 | 121 | 121 | 111 | 121 | 111 | 121 |
| 090 | 111 | 121 | 121 | 111 | 121 | 111 | 121 |
| 091 | 121 | 121 | 121 | 121 | 121 | 121 | 121 |
| 092 | 212 | 212 | 221 | 121 | 211 | 212 | 221 |

Raw Data-Job Functions (Continued)

| Subjects | Coor. Work Schedules | Plan/Develop Program | Promote Program | Document/ Paperwork | Train Staff | Evaluate Staff | Interpret Services |
|----------|-------------------------|-------------------------|--------------------|------------------------|-------------|-------------------|-----------------------|
| 093 | 111 | 111 | 121 | 111 | 122 | 121 | 121 |
| 094 | 111 | 111 | 111 | 111 | 111 | 111 | 121 |
| 095 | 111 | 111 | 111 | 111 | 111 | 111 | 121 |
| 096 | 111 | 111 | 111 | 111 | 121 | 111 | 121 |
| 097 | 111 | 111 | 121 | 111 | 121 | 111 | 121 |
| 098 | 111 | 111 | 111 | 111 | 111 | 111 | 121 |
| 099 | 111 | 121 | 111 | 211 | 121 | 111 | 111 |
| 100 | 111 | 111 | 111 | 111 | 121 | 111 | 121 |
| 101 | 111 | 111 | 121 | 111 | 121 | 111 | 111 |
| 102 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 103 | 111 | 121 | 121 | 111 | 122 | 122 | 121 |
| 104 | 111 | 111 | 222 | 111 | 121 | 111 | 121 |
| 105 | 221 | 221 | 122 | 121 | 122 | 221 | 122 |
| 106 | 111 | 111 | 111 | 111 | 111 | 111 | 121 |
| 107 | 111 | 111 | 121 | 111 | 122 | 112 | 122 |
| 108 | 221 | 221 | 212 | 221 | 122 | 221 | 122 |
| 109 | 111 | 111 | 121 | 111 | 121 | 111 | 121 |
| 110 | 111 | 111 | 111 | 111 | 111 | 111 | 121 |

Raw Data-Job Functions (Continued)

| Subjects | Coor. Work Schedules | Plan/Develop Program | Promote Program | Document/ Paperwork | Train Staff | Evaluate Staff | Interpret Services |
|----------|-------------------------|-------------------------|--------------------|------------------------|-------------|-------------------|-----------------------|
| 111 | 111 | 111 | 111 | 111 | 121 | 111 | 121 |
| 112 | 111 | 111 | 111 | 111 | 112 | 111 | 111 |
| 113 | 111 | 111 | 121 | 111 | 121 | 121 | 121 |
| 114 | 111 | 111 | 111 | 111 | 121 | 111 | 121 |
| 115 | 111 | 111 | 111 | 111 | 121 | 111 | 111 |
| 116 | 111 | 111 | 111 | 111 | 111 | 111 | 122 |
| 117 | 111 | 122 | 111 | 121 | 111 | 111 | 111 |
| 118 | 112 | 111 | 121 | 111 | 122 | 111 | 111 |
| 119 | 211 | 211 | 121 | 211 | 121 | 121 | 121 |
| 120 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 121 | 111 | 111 | 121 | 111 | 121 | 121 | 111 |
| 122 | 121 | 121 | 121 | 111 | 121 | 121 | 121 |
| 123 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 124 | 111 | 111 | 111 | 111 | 121 | 121 | 121 |
| 125 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 126 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 127 | 111 | 111 | 111 | 111 | 111 | 111 | 121 |
| 128 | 121 | 121 | 121 | 121 | 111 | 121 | 111 |

Raw Data-Job Functions (Continued)

| Subjects | Coor. Work Schedules | Plan/Develop Program | Promote Program | Document/ Paperwork | Train Staff | Evaluate Staff | Interpret Services |
|----------|-------------------------|-------------------------|--------------------|------------------------|-------------|-------------------|-----------------------|
| 129 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |
| 130 | 111 | 111 | 111 | 111 | 111 | 111 | 111 |

-1 is able to perform Job function
 -2 is not able to perform Job function

-1st column is nondisabled
 -2nd column is deaf
 -3rd column is wheelchairbound

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