

A STUDY OF THE
LEISURE SATISFACTION OF DEAF ADULTS

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BY
Cynthia M. Stanley, B.S.

DENTON, TEXAS

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The Graduate School
Texas Woman's University
Denton, Texas

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We hereby recommend that the _____ thesis _____ prepared under
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_____ of Deaf Adults _____

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Committee:

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As always, my family and friends have been understanding and supportive. I hope to reply in kind.

DEDICATION

TO MY MOTHER, WHO SAID,

"Well, you didn't think it was going to be easy, did you?"

AND

TO MY FATHER, WHO SAID,

"You can do it."

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CHAPTER I

INTRODUCTION TO THE STUDY

It is generally recognized that recreation and leisure opportunities are an important part of well adjusted living. "A major goal of recreation and leisure services is to contribute to the individuals' satisfaction and pursuit of happiness" (Beard & Ragheb, 1980, p. 21). It is believed by some social scientists that self-identity is increasingly revealed in leisure acts and leisure roles rather than in work and work roles (Godbey & Parker, 1976). In the process of self-identification, "leisure activity sometimes becomes the means by which people seek to express who and what they are" (Godbey & Parker, 1976, p. 176).

In considering special populations it is noted that, disabled people are in no way different from 'TAB' (temporarily able bodied) whole being whose needs range from vocational to social, spiritual, educational and recreational ...disabled citizens have a right to share fully in community life.

(Humphreys, 1979, p. cover)

Thus, Humphreys supports the idea that the deaf population has every right to participate in recreation and leisure.

opportunities to the extent that their needs for such are fully met.

The following was taken from a publication of The Information and Research Utilization Center (IRUC):

The recreation profession has progressed slowly in the area of service delivery to deaf persons. This population has a special need for recreation services because they are denied access to forms of recreation that require hearing (television, music, lectures, movies, theater and listening to the radio). (Physical Education, Recreation and Sports for Individuals with Hearing Impairments, 1976, p. 36)

This lack of recreational services for the deaf has been attributed to the problem of ignorance, both in recreators who lack a basic sensitivity to the deaf population and ignorance on the part of deaf persons who have not fully comprehended what recreation involves (Vernon & Fain, 1975). For the recreation professional to begin or expand programming for deaf persons, further information concerning their leisure needs is required.

It is also recognized that deaf individuals tend to form their own communities or subculture. "Most deaf persons associate with other deaf, join social deaf

organizations and intermarry" (Hardy & Cull, 1974, p. 167). "It is the communication problem and the flight from isolation that brings them together" (Switzer & Williams, 1967, p. 4). Often the deaf individual must function in the hearing world while at work and then turn to other deaf people for meeting their social needs.

What are the responsibilities for recreators and therapeutic recreators? Should the deaf population be met on their home ground in their own language (i.e. manual communication) or should all efforts be made to assist deaf individuals to be mainstreamed into the hearing world (i.e. learning to communicate effectively with hearing persons and preparing the hearing world for acceptance)? Answers to these questions may be different for different people but, at least, they need to be addressed.

This study provides basic information concerning the leisure satisfaction of deaf adults and the effect of different characteristics on that level of leisure satisfaction. This information should aid recreation professionals in their attempt to recognize and understand the leisure needs of deaf adults. Certainly the availability of this information will contribute to the general knowledge of recreators with regard to community based programming for deaf individuals.

Purpose of the Study

The purpose of this study was to determine the relationship between selected characteristics of deaf adults and their degree of leisure satisfaction.

Statement of the Problem

The problem of the study was to investigate the relationship between the degree of leisure satisfaction of selected deaf adults and the degree of deafness; the primary method of communication utilized by these individuals and the number of deaf organizations to which they belong. Data were collected through the use of the Leisure Satisfaction Scale (LSS), developed by Beard and Ragheb (1980), and a demographic questionnaire. The study was conducted in the Spring of 1982.

The resulting data were statistically treated using the Kruscal-Wallis and the Mann-Whitney tests for nonparametric data. Conclusions were drawn concerning the subjects' degree of deafness, the primary method of communication and the number of deaf organizations to which the subjects belong and the relationship of these variables to leisure satisfaction.

Definitions and/or Explanation of Terms

The following terms were defined to assure clarity and consistency within this study.

Deaf.

"A deaf person is one whose hearing disability precludes successful processing of linguistic information through audition, with or without a hearing aid" (Physical Education, Recreation and Sports for Individuals with Hearing Impairments, 1976, p. 1).

Hard of Hearing.

"An individual who has a partial loss of hearing function....means of communication is by having speech sounds amplified and his speech is affected by the degree of loss of hearing" (Cutler, 1974, p.54).

Primary Method of Communication.

The primary method of communication was the method that the subject prefers or depends on for effective communication. The following definitions of American Sign Language, Sign English/Manual English, Oral Communication and Written Communication were the types of communication methods used in this study.

American Sign Language (ASL, includes Ameslan).

ASL was recently recognized as a formal language consisting of manual configurations, expressions and body language. It is separate and distinct from English with different grammar and syntax.

Sign English/Manual English (includes Ameslish,

Siglish, Signed English, Seeing Essential English (SEE #1), Signing Exact English (SEE #2), and Linguistics of Visual English (LOVE).

"Sign English is an ASL based system modified to English syntax and word order. Instead of inventing new signs, this system utilizes increased fingerspelling....Manual English refers to the systems which retain many root signs of ASL, while at the same time creating new signs or modifying existing signs to conform to English morphology in a visual mode....These new systems have created signs for affixes, verb endings, plurality, articles, and English words which previously had no sign equivalents" (Pahz et al., 1978, p. 41,47).

Oral Communication (includes Speechreading).

Oral communication is dependent on the spoken word and includes watching the lips and facial movements of the speaker.

Written Communication.

Written communication utilizes the written or printed word.

Prelingual.

The term prelingual is an educational classification

for individuals "who were born deaf or who became deaf at such an early age (before two or three years of age) that they did not have the opportunity to acquire normal speech and language patterns" (Pahz et al., 1978, p. 41). For the purposes of this study, prelingual referred to persons who were born deaf or became deaf before the age of 4 years.

Postlingual.

The term postlingual is an educational classification for individuals "who had relatively normal hearing for at least the first two or three years of life and therefore were able to develop normal speech and language patterns" (Pahz et al., 1978, pp. 41-43). For the purposes of this study, postlingual referred to persons who became deaf after the age of 4 years.

Mild Hearing Loss.

A mild hearing loss is defined as a loss of 26 to 54 decibels of hearing (Pahz et al., 1978, p. 42).

Moderate Hearing Loss.

A moderate hearing loss is defined as a loss of 55 to 69 decibels of hearing (Pahz et al., 1978, p. 42).

Severe Hearing Loss.

A severe hearing loss is defined as a loss of 70 to 89 decibels of hearing (Pahz et al., 1978, p. 42).

Profound Hearing Loss.

A profound hearing loss is defined as a loss of 90 or more decibels of hearing (Pahz et al., 1978, p. 42).

Deaf Organizations.

For this study a deaf organization was any organization whose primary purpose is to provide services to the deaf population.

Leisure Satisfaction.

Leisure Satisfaction for each subject is expressed as a relative score determined on the Leisure Satisfaction Scale (LSS) developed by Beard and Ragheb.

Leisure Satisfaction Scale.

This testing instrument was developed by Beard and Ragheb and is "designed to provide a measure of the extent to which individuals perceive that certain personal needs are met or satisfied through leisure activities" (Beard & Ragheb, 1980, p. 22).

Hypotheses

The following null hypotheses were examined at the .05 alpha level of significance:

1. The variables of age, sex, marital status, education, and the level of income have no significant relationship to the subject's degree of leisure satisfaction.

2. The characteristic of "degree of deafness" has no significant relationship to the subject's degree of leisure satisfaction.

3. The characteristic of "primary method of communication" has no significant relationship to the subject's degree of leisure satisfaction.

4. The characteristic of "membership in deaf organizations" has no significant relationship to the subject's degree of leisure satisfaction.

Limitations

This study was subject to the following limitations:

1. The total number of deaf adults who responded to the questionnaire and Leisure Satisfaction Scale and the degree to which they completed the questionnaire.

2. The degree of understanding and objectivity with which the deaf participants were able to complete the questionnaire.

3. The degree of proficiency of the interpreter who explained the questionnaire and Leisure Satisfaction Scale to the subjects.

4. The degree to which the subjects were representative of the population from which they were drawn.

CHAPTER II

REVIEW OF THE LITERATURE

Research reviewed is discussed under the following headings: (a) Leisure Satisfaction, (b) Physiological, Psychological and Sociological Aspects of Deafness, and (c) Recreation and Leisure for the Deaf.

Leisure Satisfaction

Neulinger (1974) stated that the most common approach to the study of leisure concerns the measurement of leisure activities or the expenditure of time or money which focuses on the objective qualities of leisure. The least studied aspects of leisure, the subjective qualities, include the meaning of leisure, the satisfaction derived from leisure and the needs met by leisure.

The definition of leisure satisfaction developed by Beard and Ragheb (1980) for the purpose of instrument development is:

The positive perception of feelings which an individual forms, elicits, or gains as a result of engaging in leisure activities and choices. It is the degree to which one is presently content or pleased with his/her general leisure experiences and situations. This positive feeling of

contentment results from the satisfaction of felt or unfelt needs of the individual. (p. 22)

For many individuals, leisure activities are an important part of life which result in feelings of satisfaction and contribute to overall happiness. "Leisure satisfaction is a part of the whole that makes satisfaction with life complete" (Ragheb & Beard, 1980, p. 331).

One of the more definitive studies of leisure satisfaction is described in "Measuring Leisure Satisfaction" by Beard and Ragheb (1980). The purpose of this study was "to examine and explicate the concept of leisure satisfaction and to describe the development and adequacy of an instrument to measure it" (p. 21). After a review of the theoretical literature the effects that leisure activities had on individuals were clustered. These clusters were developed into the six subscales of the Leisure Satisfaction Scale (LSS). The LSS was "designed to provide a measure of the extent to which individuals perceive that certain personal needs are met or satisfied through leisure activities" (Beard & Ragheb, 1980, p. 22).

The six subscales, their reliabilities and a brief description of the needs that each corresponds to are as follows: psychological (.86) - benefits such as a sense of freedom, enjoyment, involvement and intellectual challenge;

educational (.90) - intellectual stimulation and learning about themselves and their surroundings; social (.88) - rewarding relationships with others; relaxation (.85) - relief from the stress and strain of life; physiological (.92) - physical fitness, staying healthy, controlling weight and otherwise achieving well-being; aesthetic (.86) - aesthetic aspects of the location of leisure activities such as beauty and design. The authors indicated that the individual components would be most helpful for counseling and research purposes.

The resulting instrument, the LSS, yielded a reliability of .96. Content validity was established by over 160 experts who gave favorable responses after examining the instrument. Beard and Ragheb (1980) stressed the need for further research on the LSS and on the concept of leisure satisfaction.

Ragheb (1980) showed that leisure satisfaction contributed to leisure attitude and that leisure satisfaction was found to be the strongest contributor and predictor of leisure participation. Additional determinants of leisure participation were variables such as leisure attitude, income, age and sex. The implications for practitioners were discussed. The effectiveness of programs and services was related to the degree that participants

gain satisfaction during activities that meet their leisure needs. The second implication was the importance of increasing leisure awareness, enabling participants to understand the potential of leisure activities for providing psychological well-being. The third point reinforced the belief that changing leisure attitudes will not have as much impact on leisure behavior as does the experience of satisfaction.

The Tinsley, Barrett and Kass (1977) study considered the need-satisfying characteristics of five commonly selected leisure activities. Of the 45 need-satisfiers selected, 42 were significantly differentiated among the activities. This suggests that those needs are leisure "activity specific needs (i.e., needs which can be satisfied to a significantly greater degree through participation in some leisure activities than by participation in other leisure activities" (Tinsley et al., 1977, p. 118). This supported the belief that the proper selection of leisure activities can satisfy the needs that must be met for life satisfaction.

In the Trafton and Tinsley (1980) study the Milwaukee Vocational Satisfaction Questionnaire (MASQ) was used with job, dyadic and general life satisfaction measures and administered to blue collar workers. The MASQ was developed

to assess satisfaction with participation in leisure activities for avocational counseling of the handicapped. The results indicated strong internal consistency for the four satisfaction scales. However, the satisfaction with leisure did not contribute significantly to life satisfaction. Several possible explanations were put forth including the fact that the MASQ was developed in a mental health setting rather than an industrial setting, the possibility that the community and income differences of the workers may have masked or suppressed the relationship between leisure and life satisfaction and that the MASQ may be a less satisfactory instrument than the others used in the investigation.

The results of the study indicated that the respondents "were able to make conceptual distinctions between their satisfaction with their job, leisure, dyadic relationship and life in general" (Trafton & Tinsley, 1980, p. 42). The second contribution made by the study demonstrates that the instruments were valid measures of the four types of satisfaction.

Crandall (1980) gave an overview of the several lines of research that compose an 'area' which he called 'motivations for leisure'. There were three main approaches to this area of leisure. The first was an 'activity

approach' which analyzes the characteristics of activities or the setting. Second was the 'person approach' which looks at personality, life cycle differences, moods or demographic characteristics which would relate to leisure motivations or satisfactions. The third approach was a look at such factors as motivations, needs and satisfactions.

Crandall then stressed the importance of researchers developing an awareness of the work being done by others in this area. He suggested an 'interactionist perspective', a way of looking at all three of the above approaches together. He believed that better integration of the different approaches would aid in defining the area in more detail for future work.

The London, Crandall and Seals study (1977) "examined the relationship between job and leisure satisfaction and their contributions to the perception of quality of life" (p. 328). Based on the data collected from a national probability sample of 1,297 adult Americans, it was found that job satisfaction and leisure satisfaction contribute independently to the individuals assessment of the quality of their life.

Leisure items were found to be better predictors of life quality than job related items. While job items and leisure items contributed to the significant variance of the

life quality of advantaged groups (white collar workers, married, high socioeconomic groups) "neither job nor leisure satisfaction was important to the life quality of relatively disadvantaged groups such as blacks and those in the low socioeconomic status groups" (London et al., 1977, p. 332-333). Individuals whose life style may not be dominated by work (females, 16 to 29 years of age, blue collar workers or mid-socioeconomic status groups) indicated that leisure satisfaction contributed to the quality of life, but that job satisfaction did not.

Those responsible for the development and implementation of leisure services (e.g. park and recreation systems) should consider the relative importance of leisure satisfaction to the quality of life when predicting usage of leisure facilities or interest in leisure activities.

(London et al., 1977, p. 333)

Physiological, Psychological and Sociological

Aspects of Deafness

Physiological Aspects of Deafness

Hereditary factors and rubella are the two major causes of congenital deafness (Vernon, 1969a, 1969b). Except for certain periods of rubella epidemics, genetic factors have

been the leading cause of deafness. Genetic problems are responsible for 50 to 60% of all deafness (Fraser, 1964; Vernon, 1968). The rubella epidemic of 1963-65 resulted in an up to 70% increase in the number of preschool children with postrubella deafness (Hardy, Monif & Sever, 1966; Vernon, 1967a).

There are two prominent causes of deafness that occur during the perinatal period. One cause is premature births. Four times more deaf children than nondeaf children are born prematurely (Vernon, 1967c). The second cause is "blood type incompatibility between the mother and the child (especially where the fetus is Rh positive and the mother Rh negative)" (Mindel & Vernon, 1971, p. 27). Rh incompatibility may result in the child's death; but of those that survive, a large portion are deaf (Vernon, 1967d; Paine, 1968; Vernon, 1970). Many of these children may have other handicapping conditions, such as cerebral palsy or language development problems (Vernon, 1967d, 1970).

Deafness that occurs in early childhood is usually caused by the destructive processes of such diseases as meningitis or encephalitis (Vernon, 1967b; Swartz & Dodge, 1965b). "Approximately 10 percent of deafness in children is caused by meningitis" (Vernon, 1967b, p. 1856). Of those children who contract meningitis, an estimated 3% to

5% will be deafened (Swartz & Dodge, 1965b). Encephalitis, caused by viral organisms that invade the brain, may result in several handicapping conditions (Swartz & Dodge, 1965a). Results may be deafness, learning disabilities or behavior disorders.

Other causes of deafness are acoustic nerve tumors usually diagnosed in the third or fourth decade of life, and accidental causes from exposure to loud noises. Presbycusis, meaning old hearing, is another cause of deafness, and results from several causes. (Schein, 1981)

There are several common misconceptions about the causes of deafness. 'Brain fever' or a high fever is unlikely to be a cause unless a specific disease is identified. Blows to the head will not result in deafness unless they are severe enough to fracture the bones of the skull that protect the auditory mechanisms (Mindel & Vernon, 1971).

The three types of hearing impairments are conductive, sensorineural and mixed. Conductive impairments result from defects in the auditory system which interferes with sound reaching the cochlea. Sensorineural impairments are caused by defects within the central nervous system. Mixed impairments involve both of the above types of hearing impairments (Schein, 1981).

The Annual Survey of Hearing Impaired Children and Youth (1973) for 1971-72 reported on 42,513 students enrolled in special education programs for the hearing impaired. Of those students, 20% had an additional handicapping condition. Also, 11.3% had two or more additional handicapping conditions. The most common additional handicapping conditions reported were mental retardation, emotional or behavioral problems, perceptual-motor problems and visual disorders.

Psychological Aspects of Deafness

Bolton, Cull and Hardy (1974) looked at six reviews of the research literature on personality and social adjustment of deaf and hard of hearing persons. Their conclusion is that the reviewers themselves are not in agreement in their findings regarding the personality and adjustment of deaf persons.

The following reviews, that Bolton, Cull & Hardy (1974) considered, show a diversity of methods and inconsistent results. Berlinsky (1952) concluded that deaf adults reach the same level of adjustment as the hearing population. He then lists some slight, but consistent differences. These include, deaf persons are more introverted, less dominant, slightly more egocentric, slightly more neurotic, and have

more trouble adjusting to their environment. They also evidence more feelings of depression and suspicion, and are less mature in judgement and social competence. Barker, et al. (1953) refused to draw any conclusions about deaf adults due to inadequacy of the studies. They concluded that deaf children in residential schools are more poorly adjusted, more unstable emotionally, and more neurotic than children with normal hearing. Di Carlo and Dolphin (1952), after reviewing more than a dozen studies, concluded that the results were inconclusive. They were critical of the research designs and measurement procedures used in the studies. Meyerson (1963) concluded that "... deafness is not directly related to personality in the sense that it requires a particular kind of adjustment" (Meyerson, 1963, p. 143). Levine (1963), in her review, felt that the personality patterns of the deaf suggest weakness and deficiencies for dealing with the complex problems of life. Schuldt and Schuldt (1972) concluded that deaf children "manifest more abnormal personality characteristics and less adequate adjustment when compared to hearing children" (Bolton, Cull & Hardy, 1974, p. 171).

In a review of research literature concerning self-concept and deafness conducted by Garrison and Tesch (1978), the most consistent finding was the suggestion that

the self-concept of the deaf individual differs from that of the nondeaf individual. The question which needs to be addressed is whether the self-concept of the deaf individual differs from hearing people on qualitative aspects or if the differences reflect a developmental lag among the hearing impaired (Garrison & Tesch, 1978). That the linguistic limitations of the child may be detrimental to both social interaction and the development of self-identity was suggested by Levine (1960) and Myklebust (1960).

A critical difference in self-image for the deaf person as compared to hearing persons is the link between communication mode and self-image (Meadow, 1976). "The phrase [my language is me] has special significance for deaf persons" (Meadow, 1976, p. 9).

However, the greatest difficulty in research concerning deaf persons is the inappropriateness of testing devices. Most of the tests used were designed specifically for hearing persons. "Psychological tests used with the deaf have been subject to so many criticisms that their results are frequently uninterpretable" (Garrison & Tesch, 1978, p. 464). "The MMPI and other verbal tests yield inaccurate pictures of most deaf person's mental status because the language level is too high" (Vernon, 1980, p. 12).

Meadow (1976) states that the personality patterns

among deaf persons are as wide as among hearing persons. Some of the subgroups of deaf people are based on the demographic indicators that divide the general population (i.e. age, sex, race). Additional subgroups of the deaf are based on experiences derived from characteristics such as degree of hearing loss, age of onset, hearing status of family members, type of schooling, preferred method of communication and degree of communication with the deaf subculture.

The first significant factor for a child born deaf is whether or not the parents are also deaf (Kennedy, 1973, p. 23). The most important early experiences are communication between deaf children and their parents and the response of the parents to the diagnosis of hearing impairment in their child. "Recent research has shown that a child can be severely handicapped if no one communicates with him meaningfully during the first three years of life" (Furfey & Harte, 1969, p. ix). Cognitive retardation and psychological maladaptation remain frequent among deaf children and adults. The core of these difficulties may be in the absence of gratifying reciprocal communication within the family during the deaf child's early years" (Best, 1973, p. 15). Another study showed that only 12% of deaf adults had any hearing family members that used sign language

(Rainer, Altshuler and Kallmann, 1969, p. 17). Another study showed the deaf children of deaf parents scoring higher in maturity, responsibility and independence than the deaf children of hearing parents (Schlesinger & Meadow, 1972).

Difficulties in communication extend into the educational sphere. The deaf individual with no additional mental handicapping condition, has the innate intelligence equivalent to hearing persons. Yet, communication problems retard the deaf child's educational process. Best (1973) stated:

The problem is serious: 1) the deaf student suffers from a three to four year lag in education achievement compared with his hearing counterpart, 2) the average deaf adult reads at the fifth grade level or below, 3) only 12% of deaf adults achieve linguistic competence, 4) only 4% become proficient speechreaders or speakers. (p. 15)

"The most frequently stated generalization about the psychological and social development of deaf individuals is that they seem to exhibit a high degree of emotional immaturity" (Meadow, 1976, p. 2). This is also supported by the work of Myklebust (1960) and Altshuler (1974). Meadow (1976) states that "residential living negatively influences

the development of maturity" (p. 3).

Schein and Delk (1974) found that in 1972 one-half of the deaf persons aged 25 to 64 years had been educated in state residential schools. Thus, the emotional immaturity seen in deaf adults may be the result of a childhood spent in a State residential school.

Garrison and Tesch (1978), in a review of research literature, found two studies, Schlesinger and Meadow (1972) and Kennedy (1973), that applied Erikson's (1959) stages of development to deaf children. Four factors were found to affect the deaf child's positive resolution of the crises that mark each stage of development. These factors are:

- 1) negative parental reactions to the child's deafness; 2) excessive parental restraint of the deaf child's activities; 3) difficulty in communication; and 4) estrangement from normally hearing peers and teachers. (Garrison & Tesch, 1978, p. 460)

Behavior problems are found in 10% to 12% of deaf children, about 5 times the amount expected (Vernon, 1969a). These reports were based on the subjective judgement of teachers of deaf students. Also, it is important to remember that there is a high rate of additional physical and neurological handicaps among deaf children (Vernon,

1969a). A study by Furfey and Harte (1969) listed three additional kinds of handicaps found among deaf children: (a) the additional handicaps of the multihandicapped, (b) the social handicap of the nonwhite, and (c) the psychological handicap of the improperly socialized. It is also noted that deaf adults display more 'problems of living' (Rainer, Altshuler, and Kallmann, 1969).

Marginality refers to the condition of an individual who belongs to two cultures, yet is not wholly a part of either.

A number of studies suggest that persons who are totally deaf may make a better adjustment than the hard of hearing because they know that they cannot hear and unlike the hard of hearing do not have to worry about the limits of their ability to communicate. (Sussman, 1965, p. 41)

A marginal person, according to Sussman, becomes more comfortable if identity is established in either a hearing or a deaf world. The author believes this explains the split of social movements between those organized by the deaf and those organized for the deaf by the hearing. One seeks to integrate the hearing impaired fully into the hearing world and the other aims for a group of deaf which maintains only diplomatic relations with the hearing world (Sussman, 1965).

"Since deafness makes communication difficult, the deaf are more prone to isolation than hearing people" (Furfey & Harte, 1969, p. 70). Usually, deafness by itself is not the only reason for isolation. Factors that hearing people can overcome (moving, family breakups, old age) may be more difficult for deaf people. If the deaf person is somewhat less than normal in social responsiveness, isolation becomes very difficult to avoid. For those deaf people who cannot communicate with either the hearing or the deaf, isolation is almost certain (Furfey & Harte, 1969).

Sociological Aspects of Deafness

Deafness is often referred to as an "invisible handicap". With no clue to explain the lack of response, lack of understanding or an inappropriate response, hearing people often respond with anger, anxiety or the impression that the hearing impaired individual is mentally retarded or socially unacceptable. Avoidance or ridicule seems to be the most common response by hearing individuals toward the deaf. In Glass' article it is noted how this differs from the response to persons who speak a foreign language.

An interesting commentary is, that if we were traveling in a foreign country and spoke to a native, we would 1) try to learn something of his

language, 2) repeat in a way he might understand, perhaps by gesture, 3) look for an interpreter (Glass, 1974, p.64).

"If the individual is hard of hearing and wearing a (visible) hearing aid, we know something is the matter, but in our mechanistic orientation, it seems only necessary to turn it on or up and everything will be OK" (Glass, 1974, p.64). The numerous factors affecting the successful use of the hearing aid involve explanations that are not easily available to the general population.

Some of the barriers deaf people must battle against are attitudinal barriers defined as "a way of thinking or feeling resulting in behavior that limits the potential of disabled people to be independent individuals" (Regional Rehabilitation Research, n. d., p. 4). Examples are fear, ignorance, stereotyping, insensitivity and discrimination. There are a number of myths about deaf people that the general hearing population hold. These include: (a) All hearing impaired persons can read lips, (b) Deaf people aren't very bright because they have not learned proper grammar, and (c) Hearing aids totally correct impairments. (Regional Rehabilitation Research, n. d.).

These views and attitudes are sometimes reinforced by hearing impaired individuals. It is estimated that only 23%

of the deaf population can learn to speechread effectively (Glass, 1974). Other individuals guess at what is being said and attempt to respond properly. It is also estimated that only 40% of the English language is visible on the lips. It is no surprise then that deaf individuals often respond inappropriately to spoken communication. Many mannerisms of deaf people support the myths and misconceptions. "They learn to smile and nod yes when they are asked if they understand in order to avoid hostility often aroused in the person who is asked to repeat again and again" (Schein, 1981, p. 399).

Many times deaf children fail to receive the proper socialization which results in the development of undesirable traits peculiar to their handicap. Jacobs (1972) discusses several of these traits. They are: (a) shuffling of the feet or treading heavily, (b) making a great deal of noise while eating, (c) vocal noises such as grunting, humming and screaming when excited or angry, and (d) extreme facial expressions.

Without the necessary social education many deaf people never learn that it is inappropriate to ask personal questions, or to address older people or supervisors by their first name. Many deaf boys never learn the ordinary respect that is extended to women and have developed a crude

attitude toward them. These traits found in some deaf people hinder the deaf people, as a whole, in their efforts to gain acceptance.

Many deaf children are so accustomed to being given everything and having everything done for them, that they develop a 'gimme' attitude. Sometimes these things are done out of pity or in the belief that the deaf person couldn't possibly handle it themselves. Often deaf people never develop a sense of responsibility and have not had to experience the consequences of bad decisions. These children become adults that "think nothing of playing hookey from their jobs" (Jacobs, 1972).

Deaf Subculture. There exists a subculture made up of deaf individuals. One explanation for the existence of this subculture is that "they socialize with other deaf persons because the severity of their disability prevents easy integration into general society" (Schein, 1981, p.399).

Meadow (1975) states that there are distinct characteristics of the deaf subculture:

- 1) There is a great deal of in-marriage of the deaf population. The study conducted by Rainer, Altshuler and Kallmann (1969) found that 95% of the deaf adults in New York state married other deaf persons. Other research, Best (1943), Bruce (1960), Furfey and Harte (1969), Justman and

Moskowitz (1967), Lunde and Bigman (1959), and Rosenstein and Lerman (1963), support this conclusion.

2) There are, also, voluntary organizations whose members are almost all deaf. One of the larger organizations is the National Association of the Deaf. There are sports organizations, religious organizations and social clubs on the local, state and national level whose membership encompass only deaf individuals.

3) National television has begun to include closed captioning in their programming, and some stations broadcast the news in sign language.

4) The traditional state operated residential schools are important for the maintenance and transmission of the deaf subculture.

5) The most important and visible feature of the deaf subculture is the use of ASL (American Sign Language or Ameslan) (Meadow, 1975, p. 17).

Meadow believes that the deaf community can be broken into four subgroups signified by how and when the individual learned ASL. The first subgroup is a very small one. It consists of deaf persons who were exposed to ASL from birth or early infancy. These are deaf children of deaf parents (about 8% to 10 % of the total deaf population). The second group is formed by "the deaf children of hearing parents who

enroll in residential schools at about the age of six" (Meadow, 1975, p.17). The language is transmitted primarily from child to child. The third subgroup consists of deaf children who switch from an oral school to a state residential school at about the age of 12 or 13 years. This occurs because the children are considered unable to learn spoken language and are resigned to an institution which allows the 'dreaded' signs. Often this is considered a failure on the part of the child and can lead to emotional problems for the child. The last subgroup is comprised of deaf persons who enter the subculture after they reach adulthood. It is a small group and not much is known about them.

There are courtesy members of deaf communities. These are hearing individuals who may be interpreters, educators, counselors or friends of the deaf. Often they have deafness in their family (Higgins, 1979). "Hard of hearing persons seldom join the deaf community, especially if their loss occurred in adulthood" (Schein, 1981, p.399). Also, being hearing impaired, in and of itself is not enough to be a member of the deaf subculture.

Deafness does not make its members part of a natural community. [sic.] (Furth, 1973:2) Membership in deaf communities must be achieved. It is

not an ascribed status (Markowicz and Woodward, 1975). Membership in a deaf community is achieved through (sic.) 1) identification with the deaf world; 2) shared experiences of being hearing impaired 3) participation in the community's activities. Without all three characteristics one cannot be nor would one choose to be a member of a deaf community (Higgins, 1979, p. 6).

Higgins (1979) describes the deaf community in Chicago in a study conducted in 1977 which investigated the identity, interaction and community of the deaf in a hearing world. Data was gathered from in-depth interviews with 75 hearing impaired people and 15 counselors or friends of the deaf. The author concluded:

Membership in deaf communities...is neither granted nor sought by all who are deaf. Rather, it is achieved through identification with the deaf world, shared experiences of being hearing impaired and involvement with other members. (p. 19)

However, the investigator also indicated that "not fully embracing and using sign language may call into question one's identification with and commitment to the deaf community" (Higgins, 1979, p. 20). Even though signers

(those who use manual communication) and speakers (those who rely on speechreading and speech) may attend the same religious, social or community events, divisions are sometimes apparent. He feels this is an outgrowth of how educators of the the deaf have traditionally felt it best to teach deaf children. This refers to the 'oral' vs. 'silent' controversy that has existed for the past 200 years.

In a discussion of the deaf community, mention must be made of Gallaudet College, the world's only liberal arts college for the deaf, established in 1864. It has everything a hearing school has except a band. It offers the hearing impaired person a 'normal' collegiate experience, is a focus for the deaf community, and a center of research on deafness with one of the world's largest library collections on deafness. It is also a place where hearing impaired people can profit from a college education and "find themselves" (Benderly, 1978).

Most oral students who attend Gallaudet usually go through a long process of acculturation, trying to learn sign language and becoming accepted by the deaf community. Some deaf students leave school shortly after arrival and some refuse to attempt to become a member of the community (Covington, 1980). However, many times, the need for peer group acceptance by the deaf individual will overcome the

pressure from the years of bias against signers, the parental pressure to be a hearing person, and the long years of social isolation among the hearing world. Thus, they will make the effort required to join the deaf community (Covington, 1980).

Still, some believe that "even if an oralist chooses to identify with the deaf community and to learn ASL, he or she may not be accepted as a full member of the community (Covington, 1980, p. 271). This refers to the lack of shared experience of childhood at a residential school. These oralists often become bicultural. Still they face rejection by some members of both the hearing world and the deaf community.

Oral Communication vs. Manual Communication. The oral method became the leading method of education after the Conference of Teachers of the Deaf at Milan in 1880. Previously, the French or silent method (a system of manual communication) had been used extensively. The leading figures of the oral method in the United States were Horace Mann, Dr. Samuel Howe and Alexander Graham Bell (Wright, 1969).

Oral communication as an educational method is the use of speech and lipreading (speechreading) and with amplification, the use of whatever residual hearing remains

(Wright, 1969). The theory maintains that if the pupil is forced to rely totally on oral communication it will be learned more efficiently (Furfey & Harte, 1969, p. v.).

The main case against the silent and combined systems is that finger-spelling or sign language marks the user off from the rest of the community and hinders him from integrating with it because he employs a different, and to most people incomprehensible, mode of communication. The signing deaf, as much as any minority group speaking a foreign language, tend to form an enclave separate from the bulk of the community (Wright, 1969, p. 192).

"Part of the bitterness of the dispute has been due to the uncompromising stand taken by "pure oralist" teachers against any form of signing whatever". (Wright, 1969, p. 193)

The language of signs was brought to America by Dr. Thomas H. Gallaudet and Laurent Clerc, a deaf assistant, after studying the method used by the French school founded by Abbe de l'Eppe. Sign language has been gaining respectability and is now considered a language in its own right. Some colleges and universities accept sign language as a fulfillment of the doctoral requirement for proficiency

in a foreign language (Riekehof, 1978, p. 7).

In the last decade, the method or philosophy of Total Communication has moved to the forefront. The Maryland School for the Deaf has been a strong advocate for the use of Total Communication. The Superintendent of that school, David Denton, gave this definition of Total Communication:

the right of a deaf child to learn to use all forms of communication available to develop language competence. This includes the full spectrum of child devised gestures, speech, formal signs, fingerspelling, speechreading, reading, and writing. To every deaf child should also be provided the opportunity to learn to use any remnant of residual hearing he may have by employing the best possible electronic equipment for amplifying sound. (Denton, 1970, p. 5)

Interaction between Deaf and Hearing Persons. Furfey and Harte (1969) conducted a study of the interaction of deaf and hearing persons using the casework method. The data was divided into three categories labeled Contact Score, Local Knowledge Score and General Knowledge Score which had reliabilities of .63, .76 and .67, respectively.

In the study all the subjects were rated on their ability to communicate with hearing people. The ratings on

the scale were excellent, above average, average (the average deaf person is not very successful in communication with hearing people), poorer than average, and none or partially none. Those rated as excellent comprised one-seventh of the sample. Most of the subjects in this category were adventitiously deaf and had lost their hearing after learning to talk. Others still had a considerable amount of residual hearing. These hearing impaired people are not very representative of the deaf population. "Only a minority of the deaf can succeed well in oral communication with the hearing" (Furfey & Harte, 1969, p. v).

In a summation of the characteristics of the interaction between deaf and hearing persons, the authors compared the deaf to other minority groups. The authors noted:

Contact with them (the deaf) does not lead to knowledge. They are a minority group and like other minority groups they suffer. However, their disadvantaged status arises less from their neighbors' prejudice than from their neighbors' ignorance. Possibly this is the major conclusion of our study. (p. 67)

Recreation and Leisure for the Deaf

Justman and Moskowitz (1967), in a descriptive study, presented a questionnaire with 129 items to graduates of the School for the Deaf in New York City. The subjects were found to have leisure time activities similar to those of hearing people. Television (92.6%) and movies (85.3%) were the most popular. Membership in clubs was very high although the types of clubs was not described. The authors concluded that "while a broad picture of recreational choices emerges...little light is thrown on the extent of social interaction" (p. 54).

Nanette Fabray (1969) in her address titled The Deaf Man and the World of Play focused on the entertainment aspect of recreation. Discussion following the address identified the following recreational needs:

1. The need to foster recreational activities which may carry over to adult life; including emphasizing recreation as a means of fostering effective relationships with hearing persons.
2. The need to include deaf children in family recreation.
3. The need to allow deaf children to initiate, create and develop leisure time activities.
4. The need to develop summer recreation programs.

5. The need to develop cultural appreciation in deaf children.

6. The need to adapt commercial media for the deaf (p. 84-85).

Deaf Organizations and Clubs. Schein (1968) considered the importance of organizations to the deaf individual and to the deaf subculture. The target population for the study was adult, noninstitutionalized, deaf people living in metropolitan Washington, D.C. "Participation in the activities of the clubs of the deaf is high" (Schein, 1968, p. 73). Of the deaf persons studied, 68% belonged to one or more of the organizations of the deaf. About 1/3 of the sample held memberships in one or two organizations and another 1/3 belonged to more than two organizations. Other statistics from this study indicated that members of deaf organizations were fairly active in their membership. Of those deaf people that belonged to one or two organizations, 51% attend meetings more than 12 times a year and 15% attend meetings once a week or more. Only 16% of the subjects did not attend the meetings of the organizations in which they hold membership (Schein, 1968).

Approximately 70% of the subjects did not belong to an organization that was considered to be a nondeaf organization. Of the remaining 30% who did participate in

nondeaf organizations, 54% participated in recreational organizations with a hearing membership. Schein reported the other memberships in organizations as: (a) 52% in professional societies, (b) 24% in organizations concerning occupational demands and interests, (c) 24% in Parent-Teacher Associations, (d) 22% in church oriented organizations, and (e) 16% in civic organizations.

The importance of clubs and organizations for the deaf was also found in the Furfey and Harte (1969) study. The authors stated:

Special social clubs for the deaf play a very important part in lives of many of the Baltimore deaf. Here, again, manual skill is an almost necessary prerequisite for membership. The deaf lacking such skill thus miss an important defense against that social isolation that is always a threat to the deaf. (p. vii)

Social events are highly valued by the deaf. It is difficult to converse at work, even with other deaf people and telephone conversations (i.e. TTY communication) are very few and, usually, business oriented. Furfey and Harte (1969) observed:

All kinds of formal and informal social functions for the deaf, whether strictly social,

recreational or athletic, are very well attended by the deaf....One interesting feature about these group meetings, whether organized in the technical sense or not, is that they are established by the deaf, run by and for the deaf. (p. 57)

Williams and Sussman (1971) discussed the role of deaf organizations. On both the national and the state level, these organizations "provide leadership, recreation, safeguard rights and promote group welfare" (p. 23). The authors emphasized that "unlike some other disability groups deaf people have always taken care of their own social needs" (p. 23).

Schein (1968) also looked at other types of activities that deaf people participate in during their leisure time. The author reported that more than 91% of the subjects participated in some social activity. "Interest in sports occupy a great deal of free time" (p. 74). The most popular sporting activities were swimming, bowling and fishing. The most popular spectator sports reported were baseball, basketball, football and wrestling, in that order.

As with other social activities, sports are enjoyed mostly with other deaf persons, rather than hearing companions. Baseball is most frequently played with (against) hearing persons;

basketball most frequently with other deaf persons. (p. 75)

Other leisure activities were reported by Schein (1968): Of the sample, 95% watched television and 71% had seen a movie in the three months prior to being interviewed. The following statistics indicate that reading was a popular activity: (a) 87% subscribed to one or more nationally circularized magazines, (b) 99% subscribed to a daily newspaper, (c) 40% had read a book in the week prior to the interview, and (d) 30% had a library card. (p. 75)

Public Agencies and the Deaf Populations. Another aspect concerning the deaf population, which has importance for community-based recreators or therapeutic recreators, is the small percentage of deaf people who participate in public recreational programs. This follows a general trend of under service to or under used service by the deaf population by most public agencies. Williams and Sussman (1971), both of whom are deaf persons, comment on the relationship of the deaf subculture and the lack of participation in public services.

For many deaf individuals, the subculture increases his unawareness of the flow of events in the larger culture. Thus, his proneness to be uninformed of matters that are important to him is

intensified. One of the manifestations is his unawareness of his community's service programs. As a taxpayer and citizen, he is entitled to their services but often may not know of them and consequently, not apply. (p. 24)

Lloyd (n. d.) also recognizes this problem between public agencies and the deaf population. The author probes into the possible sources of this problem.

Perhaps the various tax-supported agencies and programs are remiss in not offering their services to deaf people. Perhaps they may not have done so because they a) may not be aware of the need; b) may not understand the nature of deafness; or c) may be unable to determine in what ways they could work effectively with deaf people...It is just barely possible that much of the failure in securing services for deaf people is the direct result of the deaf community's inability or unwillingness to find ways to overcome the problems that exist. It very well may be that deaf people have an obligation to extend a helping hand to the agencies to enable them to overcome those problems they might have in order to help deaf people with problems they may have. (p. 1)

CHAPTER III

PROCEDURES FOLLOWED IN THE DEVELOPMENT OF THE STUDY

This chapter describes the processes and procedures involved in the study of selected characteristics of deaf adults and their degree of leisure satisfaction. The procedures followed in this study are presented under the following six headings: (a) Preliminary Procedures, (b) Selection of the Subjects, (c) Selection of the Instrument, (d) Collection of the Data, (e) Organization and Treatment of the Data, and (f) Preparation of the Final Report.

Preliminary Procedures

Prior to initiating the study the investigator surveyed, studied and assimilated all available documentary sources. Literature related to the study was identified by the traditional methods.

Subsequently, a Tentative Outline was developed, presented to members of the Thesis committee and revised in accordance with their suggestions. The revised and approved outline was filed in the form of a Prospectus in the Office of the Provost of the Graduate School.

Selection of the Subjects

The subjects were selected from organizations and

agencies in which hearing impaired individuals hold membership or participate in activities. The criteria established for the selection of subjects were: (a) age of 21 to 65, (b) hearing impaired, and (c) involved in some organization or agency providing service to the deaf population. The responses of 30 subjects were used in this study. The subjects were individual members of the Fort Worth Association of the Deaf or visitors to the Theater for the Deaf at Callier Center in Dallas.

Selection of the Instrument

Of the available instruments for testing leisure satisfaction the LSS developed by Beard and Ragheb (1980) was chosen. The selection was based on the extensive testing done on the instrument and the high reliability and validity established for the LSS.

A questionnaire was designed to gather demographic information and data related to the selected characteristics of deaf adults. The questionnaire was approved after a revision based on the suggestions of the members of the Thesis committee. The resulting instrument composed of the LSS and the demographic questionnaire was utilized for this study. A copy of the instrument is located in Appendix A.

Collection of the Data

The times and locations for the group administration of

the LSS and the demographic questionnaire were scheduled in agreement with representatives of the Fort Worth Association of the Deaf (FWAD), in Fort Worth, Texas and the Theater for the Deaf at Callier Center, in Dallas, Texas. The services of an interpreter were utilized at the meeting of the members of the FWAD. The communication skills of the investigator were utilized at the Theater for the Deaf at Callier Center. The completion of the instrument relied on the reading and comprehension skills of the subjects. The interpreter and/or the investigator were available to answer questions and clarify meanings as the subjects requested such information.

Organization and Treatment of the Data

The organization and treatment of the data was facilitated by the use of the DEC-20 computer system located at Texas Woman's University. The raw data was converted to a coding system and typed into the on-line terminal by the investigator.

A portion of the Interactive Statistical Package (ISP) was utilized for the treatment of the data. The frequency distributions of the variables were tabulated. The Kruscal-Wallis and the Mann-Whitney tests for nonparametric data provided the necessary statistical computations.

The statistical results were examined, interpreted and

grouped into appropriate tables. These data are presented and analyzed in Chapter 4. The summary of the findings and the conclusions are presented in Chapter 5.

Preparation of the Final Report

Each chapter of the written report was prepared by following a topical outline. The references were prepared and an appendix compiled. The report was presented to and revised in accordance with the suggestions of the members of the Thesis committee.

CHAPTER IV

PRESENTATION OF THE FINDINGS

The purpose of this study was to determine the relationship between selected characteristics of deaf adults and their leisure satisfaction. The data were collected from the subjects' responses to the LSS and the demographic questionnaire. The findings of the study are presented in this chapter under the following headings: (a) General Demographic Information, (b) Demographic Information Specific to Deafness, and (c) Leisure Satisfaction and Characteristics of the Subjects.

General Demographic Information

This section describes the study population in terms of general demographic variables. The variables presented are age, sex, marital status, education and income.

Table 1 illustrates the frequency distribution of the subjects' age by categories. The majority of the subjects were in the age group 26 to 34 years. This group included 11 subjects, which comprised 36.7% of the total respondents. Approximately one-half of the subjects (53.4%) were under the age of 44. One subject did not respond to the question on age.

Table 1
Age of the Subjects

Age (in years)	Frequency	Percentage
<25	5	16.7
26-34	11	36.7
35-44	7	23.3
45-54	3	10.0
>55	3	10.0
No response	1	3.3
Total	30	100.0

Table 2 presents the frequency distribution of the responses given by the subjects in relation to their sex. Of the respondents, 16 were male (53.3%) and 13 were female (43.3%). One subject did not respond.

Table 2
Sex of the Subjects

Sex	Frequency	Percentage
Male	16	53.3
Female	13	43.3
No response	1	3.3
Total	30	100.0

The frequency distribution of responses to the question of marital status are recorded in Table 3. Fifty percent of the subjects were married. The second largest group (26.7%) was represented by those who were single.

Table 3
Marital Status of the Subjects

Marital status	Frequency	Percentage
Single	8	26.7
Partner	3	10.0
Married	15	50.0
Separated, Widowed, or Divorced	4	13.3
Total	30	100.0

Table 4 presents the numbers and percentages of responses concerning the educational level of the subjects. The range of possible answers was from less than 8 years of schooling to more than 5 years of college. Two groups, the 9 to 12 years of education and the 1 to 2 years of college, contained the identical number of respondents, 7 (23.3%). It can be noted that 46.6% of the subjects had completed between 9 and 14 years of education.

Table 4
Educational Level of the Subjects

Education	Frequency	Percentage
<8 yrs.	3	10.0
9-12 yrs.	7	23.3
1-2 yrs. college	7	23.3
3-4 yrs. college	5	16.7
>5 yrs. college	8	26.7
Total	30	100.0

Table 5 illustrates the distribution of the income variable according to the subjects' responses. The largest group of subjects (30%) marked the over \$20,000 per year income category. The second largest group (23.3%) was the \$10,001 to \$14,000 per year income category. Forty three percent of the subjects earned over \$14,001 per year. One subject did not respond to the question.

Table 5
Income of the Subjects

Annual income	Frequency	Percentage
<\$8,000	5	16.7
\$8,001-\$10,000	4	13.3
\$10,001-\$14,000	7	23.3
\$14,001-\$20,000	4	13.3
>\$20,000	9	30.0
No response	1	3.3
Total	30	100.0

Demographic Information Specific to Deafness

This section describes the demographic information that is specific to the subjects' deafness. The variables presented are (a) the primary method of communication used with deaf persons, (b) the primary method of communication used with hearing persons, (c) the age of onset of the hearing impairment, (d) the degree of hearing impairment, (e) the number of deaf organizations the subjects belonged to or visited and, (f) the kind of deaf organizations the subjects belonged to or visited.

Table 6 presents the subjects' responses to the question of their primary method of communication with deaf people and with hearing people. Over 60% of the subjects marked either ASL or sign language as the primary communication method utilized with deaf persons. Over one-half (56.7%) of the subjects indicated that the oral method was their primary method of communication with hearing persons.

Table 6
Primary Method of Communication
with Deaf and with Hearing Persons

Communication method	With Deaf Persons		With Hearing Persons	
	Frequency	Percentage	Frequency	Percentage
ASL	10	33.3	2	6.7
Sign	9	30.0	3	10.0
Oral	6	20.0	17	56.7
Written	1	3.3	7	23.3
No response	4	13.3	1	3.3
Total	30	100.0	30	100.0

The second largest response (23.3%) for communication method with hearing persons was written communication. Four

subjects failed to respond to the question of communication method with deaf persons and one subject did not respond to the question of communication method with hearing persons.

Table 7 illustrates the time of onset of the subjects' hearing loss. The majority (90.0%) of the subjects lost their hearing prelingually. Only 10.0% of the subjects lost their hearing after the age of four, which is considered a postlingual loss.

Table 7
Onset of Hearing Loss

Onset	Frequency Percentage	
Birth	18	60.0
0-4 yrs	9	30.0
>4 yrs	3	10.0
Total	30	100.0

Table 8 illustrates the data representing the subjects' degree of hearing impairment. The largest category (36.7%) was that of the moderate hearing impairment, followed by profound (26.7%) and severe (23.3%). Fifty percent of the subjects had either a severe or profound hearing impairment. One subject failed to respond to the question of his/her

degree of hearing impairment.

Table 8
Degree of Hearing Impairment

Degree	Frequency	Percentage
Mild	3	10.0
Moderate	11	36.7
Severe	7	23.3
Profound	8	26.7
No response	1	3.3
Total	30	100.0

Table 9 records the number of deaf organizations that the subjects belonged to or visited. Over 60% of the subjects belonged to or visited one or two organizations. Over a third (36.7%) of the subjects participated in four or more organizations.

Table 9
Membership in Deaf Organizations

Number of organizations	Frequency	Percentage
One	12	40.0
Two	7	23.3
Four or more	11	36.7
Total	30	100.0

Table 10 describes the types of organizations in which the subjects held membership or visited. Forty three percent of the subjects indicated they attended social or athletic organizations. Only one subject (3.3%) responded that he/she participated in a service organization. Four subjects failed to respond to this item.

Table 10
Type of Organization

Type of organization	Frequency	Percentage
Church	4	13.3
Athletic	6	20.0
Social	7	23.3
Service	1	3.3
Other	7	23.3
Multi-answer	4	13.3
Total	30	100.0

Hypothesis Testing

This section presents the data concerning the relationship between the subjects' LSS score, the demographic variables and the characteristics related to deafness. The Kruscal-Wallis one-way analysis of variance and the Mann-Whitney were utilized in testing the hypotheses. All data in this section were analyzed at the .05 alpha level of significance. The treated data concerning hypothesis one are presented in Tables 11 through 15.

Hypothesis One

The variables of age, sex, marital status, education, and the level of income will have no significant relationship to the subject's degree of leisure satisfaction.

Table 11 presents the results of the Kruscal-Wallis analysis of leisure satisfaction and the subjects' age. The results produced an H of 2.26 with a p of .687. These findings indicate that the degree of leisure satisfaction was not significantly related to the age variable.

Table 11

Kruscal-Wallis Analysis of Leisure Satisfaction and Age

Age (in yrs)	n	Rank Sum	H	p
>25	5	80.50		
26-34	11	169.00		
35-44	7	78.50	2.26	.687
45-54	3	57.00		
>55	3	50.00		

Table 12 illustrates the results of the Mann-Whitney test as applied to the data on the subjects' sex. The

resultant value was $\underline{U} = 78.5$, $\underline{p} = .268$. Thus, there was no significant relationship between leisure satisfaction and the sex of the subject.

Table 12

Mann-Whitney \underline{U} Analysis of Leisure Satisfaction
and Sex

Sex	\underline{n}	Rank Sum	\underline{U}	\underline{p}
Male	16	16.59	78.5	.268
Female	13	13.04		

Table 13 describes the results of the Kruscal-Wallis test as applied to the data on the subjects' marital status. The value of \underline{H} was found to be 2.44 with a \underline{p} of .486, suggesting that there was no significant relationship between marital status and the degree of leisure satisfaction.

Table 13
Kruscal-Wallis Analysis of Leisure Satisfaction and
Marital Status

Marital Status	<u>n</u>	Rank Sum	<u>H</u>	<u>p</u>
Single	9	163.00		
Partner	3	44.50	2.44	.486
Married	14	218.00		
Separated, Divorced, or Widowed	4	39.50		

Table 14 records the results of the Kruscal-Wallis test as applied to the data on the subjects' level of education. The resultant value was $\underline{H} = 1.99$, $\underline{p} = .738$. These findings indicated that there was no significant relationship between the subject's level of education and their leisure satisfaction.

Table 14
Kruscal-Wallis Analysis of Leisure Satisfaction
and Education

Educational level	<u>n</u>	Rank Sum	<u>H</u>	<u>p</u>
<8 yrs.	3	57.50		
9-12 yrs.	7	115.00		
1-2 yrs. college	7	121.00	1.99	.738
3-4 yrs. college	5	73.00		
>5 yrs. college	8	98.50		

Table 15 presents the results of the Kruscal-Wallis test as applied to the data on the subjects' level of income. The results produced an H of .31 with a p of .858, suggesting that there was no significant relationship between the subject's leisure satisfaction and their level of annual income. The findings for each of the variables of age, sex, marital status, educational level and annual income indicated no significant relationship to leisure satisfaction. Thus, the first null hypothesis was accepted.

Table 15

Kruscal-Wallis Analysis of Leisure Satisfaction and Income

Annual income	<u>n</u>	Rank Sum	<u>H</u>	<u>p</u>
<\$8,000	6	114.00		
\$8,001-\$10,000	4	32.00		
\$10,001-\$14,000	7	101.00	4.21	.378
\$14,001-\$20,000	4	66.50		
>\$20,000	8	121.50		

Hypothesis Two

The characteristic of "degree of deafness" has no significant relationship to the subjects' degree of leisure satisfaction.

The treated data concerning this characteristic are presented in Tables 16 and 17. Table 16 illustrates the results of the Kruscal-Wallis test as applied to the data on the subjects' onset of their hearing impairment. The results produced an H of .31 and a p of .858. These findings indicated that leisure satisfaction was not significantly related to the age of onset of the hearing impairment.

Table 16
Kruscal-Wallis Analysis of Leisure Satisfaction
and Onset of Hearing Impairment

Onset	<u>n</u>	Rank Sum	<u>H</u>	<u>p</u>
Birth	18	266.00		
0-4 yrs	9	150.00	.31	.858
>4 yrs	3	49.00		

Table 17 describes the results of the Kruscal-Wallis test as applied to the data on the subjects' degree of deafness with the resultant value of $\underline{H} = 5.44$, $\underline{p} = .142$. These findings reveal that there was no significant relationship between the subjects' degree of deafness and their leisure satisfaction. The findings for each of the variables of "onset of hearing impairment" and "degree of deafness" indicated no significant relationship to leisure satisfaction. Thus, the second null hypothesis was accepted.

Table 17
Kruscal-Wallis Analysis of Leisure Satisfaction
and the Degree of Deafness

Degree	<u>n</u>	Rank Sum	<u>H</u>	<u>p</u>
Mild	3	32.00		
Moderate	11	150.50	5.44	.142
Severe	7	149.50		
Profound	8	103.00		

Hypothesis Three

The characteristic of "primary method of communication" will have no significant relationship to the subject's degree of leisure satisfaction.

The treated data concerning this characteristic are presented in Tables 18 and 19. Table 18 records the results of the Kruscal-Wallis test as applied to the data concerning the primary method of communication with deaf persons. The results produced on H of 1.31 and a p of .728 which indicated that leisure satisfaction and the primary method of communication with deaf persons were not significantly

related.

Table 18

Kruscal-Wallis Analysis of Leisure Satisfaction and the
Primary Method of Communication with Deaf Persons

Communication method	<u>n</u>	Rank Sum	<u>H</u>	<u>p</u>
ASL	11	169.00		
Sign	8	99.50	1.31	.728
Oral	6	68.00		
Written	1	14.50		

Table 19 presents the results of the Kruscal-Wallis test as applied to the data on the subjects' primary method of communication with hearing persons. The resultant value was $H = 1.27$, $p = .736$ which demonstrated that leisure satisfaction and the primary method of communication with hearing persons were not significantly related. The findings for each of the variables of "primary method of communication with deaf persons" and "primary method of communication with hearing persons" indicated no significant relationship to leisure satisfaction. Thus, the third null

hypothesis was accepted.

Table 19

Kruscal-Wallis Analysis of Leisure Satisfaction and the
Primary Method of Communication with Hearing Persons

Communication method	<u>n</u>	Rank Sum	<u>H</u>	<u>p</u>
ASL	2	35.00		
Sign	3	57.50		
Oral	17	234.00	1.27	.736
Written	7	108.50		

Hypothesis Four

The characteristic of "membership in deaf organizations" will have no significant relationship to the subject's degree of leisure satisfaction.

The treated data concerning this characteristic are presented in Tables 20 and 21. Table 20 illustrates the results of the Kruscal-Wallis test as applied to the data on the number of deaf organizations that the subjects belonged to or visited. The results produced an H of 3.05 and a p of .218. These findings reveal that leisure satisfaction and

the number of deaf organizations were not significantly related.

Table 20

Kruscal-Wallis Analysis of Leisure Satisfaction and
Membership in Deaf Organizations

Number of organizations	<u>n</u>	Rank Sum	<u>H</u>	<u>p</u>
One	12	174.50		
Two	7	143.50	3.05	.218
Three or more	11	147.00		

Table 21 describes the Kruscal-Wallis as applied to the data on the types of deaf organizations the subjects were members of or visited. The additional category of multi-answer was included since the subject could have associated with more than one type of deaf organization. The resultant value was $\underline{H} = 6.98$, $\underline{p} = .222$. The findings for each of the variables, "membership in deaf organizations" and "type of organization" indicated no significant relationship to leisure satisfaction. Thus, the fourth null hypothesis was accepted.

Table 21

Kruskal-Wallis Analysis of Leisure Satisfaction and
the Type of Organization

Type of organization	<u>n</u>	Rank Sum	<u>H</u>	<u>p</u>
Church	4	57.00		
Athletic	6	85.00		
Social	7	132.00	6.98	.222
Services	1	29.00		
Other	7	68.00		
Multi-answer	4	64.00		

CHAPTER V
SUMMARY, DISCUSSION, CONCLUSIONS, AND
RECOMMENDATIONS FOR FURTHER STUDY

Summary

The purpose of this study was to investigate the leisure satisfaction of deaf adults as related to selected characteristics of deaf adults. The three characteristics utilized were (a) the degree of deafness, (b) the primary method of communication, and (c) membership in deaf organizations. The subjects were 30 deaf adults who were members of or visitors to the Fort Worth Association of the Deaf or the Callier Center Theater for the Deaf. The Leisure Satisfaction Scale and a demographic questionnaire were administered to the subjects in the Spring of 1982.

A thorough survey of the related literature revealed that no research had been done regarding the leisure satisfaction of deaf adults. The literature on leisure satisfaction, a relatively new field of research, indicated that this concept was an important component of life satisfaction. The review of literature regarding the deaf population revealed that: (a) Research done on the deaf population has very often been inconclusive or resulted in faulty conclusions due to the inadequacy of the testing

devices, (b) Deaf individuals have different needs than hearing individuals for positive psychological and sociological development, (c) The choice of communication methods is important to the identification of a deaf individual, (d) Often, deaf individuals will participate in a deaf subculture, (e) Deaf organizations are an integral part of the deaf community, (f) Public agencies have had a problem with under-service to and under-use of service by the deaf population.

The majority of the subjects in this study were married males who were 26 to 44 years of age with 9 to 14 years of education, whose annual income exceeded \$10,001. The demographic data related to deafness indicated that the majority of the subjects were prelingually hearing impaired, with either a severe or profound degree of impairment.

Over one half of the subjects used ASL or sign language when communicating with deaf persons. The oral or written communication method was utilized with hearing persons by a large majority of the subjects. More than a third of the subjects indicated that they associated with four or more deaf organizations. The social or athletic organizations were the most common type of group to which the subjects belonged.

The LSS scores and the data concerning the selected

characteristics of deaf adults were entered into the DEC 20 computer system at Texas Woman's University. Statistical analysis was accomplished using the Kruscal-Wallis and the Mann-Whitney tests for nonparametric data.

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

The variables of age, sex, marital status, education, and the level of income have no significant relationship to the subject's degree of leisure satisfaction.

The Kruscal-Wallis test was utilized for the analysis of each variable except the two category variable of sex, for which the Mann-Whitney test was utilized. It was found that there was no significant relationship between age and leisure satisfaction. The results of the analysis for sex and leisure satisfaction indicated no significant relationship. Marital status and leisure satisfaction had no significant relationship for the members of the study population. The findings related to education and the degree of leisure satisfaction indicated no significant relationship. The level of income was found to have no significant relationship to the leisure satisfaction of the subjects. Therefore, null hypothesis one was accepted.

The characteristic of "degree of deafness" has no

significant relationship to the subject's leisure satisfaction.

The onset of the hearing impairment and the degree of deafness was analyzed through the employment of the Kruscal-Wallis one way analysis of variance. Results of the Kruscal-Wallis produced an H of .31 with a significant difference of $p = .858$ for the analysis of onset of hearing impairment and leisure satisfaction. The degree of deafness and leisure satisfaction was found to have no significant relationship with the value of $H = 5.44$, $p = .142$. Therefore, null hypothesis two was accepted.

The characteristic of "primary method of communication" has no significant relationship to the subject's degree of leisure satisfaction.

The Kruscal-Wallis one way analysis of variance was used in analysing the data on primary method of communication with deaf and with hearing persons. The value for the primary method of communication with deaf persons was $H = 1.31$, $p = .728$. Primary method of communication with hearing persons was found to have no significant relationship to leisure satisfaction with the value of $H = 1.27$, $p = .736$. Therefore, null hypothesis three was accepted.

The characteristic of "membership in deaf

organizations" has no significant relationship to the subject's degree of leisure satisfaction.

Statistical analysis was performed on membership in deaf organizations and the type of organization through the use of the Kruskal-Wallis one way analysis of variance. The results produced an H of 3.05 and a p of .218 for membership in deaf organizations and an H of 6.98 and a p of .222 for the type of organization. This indicated that there was no significant relationship between leisure satisfaction and membership in deaf organizations or between leisure satisfaction and the type of organization. Therefore, null hypothesis four was accepted.

Discussion

There are several issues to be examined in considering the implications of this study for recreation professionals. For the subjects of this study, the selected characteristics had no significant relationship to their degree of leisure satisfaction. The characteristic "degree of deafness" did not relate to leisure satisfaction. This investigator believes that the degree of deafness may not be nearly as important as a descriptor for a deaf individual as other characteristics, such as the type of education received. Other characteristics that may have more impact on a deaf individual and possibly on their leisure satisfaction are

personal and social adjustment, the types of resources available to them (i.e., recreation, transportation and education), the quality of those resources, and the attitudinal barriers encountered.

The characteristic "primary method of communication" with the hearing, is still extremely limited as very few hearing people know any form of sign language. The deaf individual's willingness to attempt any communication with hearing people may be an indication of their level of trust or comfortableness with hearing people. The deaf individual's skill in communication with hearing people may give some clue as to their educational level or the amount of interaction experienced with hearing persons. The type of communication used with deaf people is often a very good indicator of the individual's level of involvement with the deaf community (i.e., the preference of ASL is basic to acceptance in many deaf communities). The type of communication preferred may also give clues to the individual's skill in the use of English. It appeared that if professional recreators were to learn sign language it would enable them to more effectively communicate with members of the deaf subculture, much the same way that learning Spanish enhances the ability to work the Hispanic subculture.

The characteristic "membership in deaf organizations" did not significantly relate to leisure satisfaction in this study. It may be more important to consider whether or not involvement with deaf organization is present rather than the type or number of organizations. Perhaps the opportunity to recreate and associate with other hearing impaired persons is a key factor in leisure satisfaction. Involvement with deaf organizations seems to indicate that the individual is, to some extent, involved with the deaf community, as deaf organizations are a central facet of the subculture. The findings that the social or athletic organizations tended to be the most common type of organization utilized by deaf individuals agrees with literature reviewed for this study.

There are many factors that affect a deaf individual. It is important to consider the characteristics of each individual rather than to accept broad generalizations.

This investigator feels that another sample of the deaf population may have different levels of leisure satisfaction and very different needs for the attainment of leisure satisfaction. For example, a different age group might have felt the effects of the extensive changes in deaf education in recent years. Total Communication is providing young deaf children with a more complete picture of the world than

strick oralism. A less educated portion of the deaf population might encounter more barriers in recreational pursuits. Since the deaf organizations appear to meet the leisure needs of their members, deaf individuals who are isolated from other deaf people may be unsuccessful in meeting their leisure needs. The results of this study are specific to one section of the deaf population and should not be generalized to include all deaf individuals.

The findings of this study revealed many implications for recreation professionals. In working with the deaf population, it is important to be aware of the characteristics of deaf individuals. Awareness and knowledge of the deaf subculture is crucial in attempting to organize and initiate recreation for deaf individuals. The structure and operation of the subculture is such that most hearing individuals will not be readily accepted. The strength and influence of the subculture is stronger than for any other handicapped population. Mainstreaming is not desired by all deaf individuals. Yet, the isolated deaf individual must be located and offered the opportunities to join with others in their leisure.

Great strides have been made in recent years in meeting the leisure needs of the handicapped population. Still, more remains to be done for the hearing impaired population. It

is only through the sharing of knowledge and the combining of efforts that the needs and rights of all individuals can be satisfied.

Conclusions

The findings of the investigator were consistent with the published literature within the limitations of this study. The major conclusions which seem to be indicated by the data obtained are as follows:

1. The participants degree of leisure satisfaction was not significantly related to any of the demographic variables.

2. The participants degree of leisure satisfaction was not significantly related to any of the selected characteristics of deaf adults.

Recommendations for Further Research

Based on the findings of this study, the recommendations and implications for further research were:

1. A replicated study with a different deaf population to substantiate the results of this study.

2. A study of the leisure satisfaction of deaf or hearing impaired individuals who are not a part of a deaf subculture.

3. A study of the leisure participation patterns of the deaf population.

4. A study of the leisure needs of deaf children.
5. Further development of testing instruments for leisure satisfaction for both the hearing impaired and the hearing population.
6. A study to design a training program for recreation personnel to work with hearing impaired individuals and the deaf subculture.
7. A study to design mainstreaming programs for both deaf children and deaf adults.

APPENDIX

LEISURE SATISFACTION SCALE

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Leisure Questionnaire

DIRECTIONS: Below are some statements on how persons feel about and perceive their leisure activities. Leisure activities are defined as non-work activities in which the individual had free choice with no obligation. Activities can be active or inactive, such as sports, outdoor activities, social activities, watching TV, reading or doing nothing.

Read each statement and then blacken the appropriate circle on the answer sheet.

If the statement is ALMOST NEVER TRUE, mark "1" on the answer sheet. If the statement is ALMOST ALWAYS TRUE, mark "5" on the answer sheet and if you are in between, mark the number which describes how true the statement is for you. There are no right or wrong answers.

Almost Never True	Seldom True	Sometimes True	Often True	Almost Always True
A	B	C	D	E

1. My leisure activities are very interesting to me.
2. My leisure activities give me a sense of self-confidence.
3. My leisure activities give me a sense of accomplishment.
4. I use many different skills and abilities in my leisure activities.
5. My leisure activities increases my knowledge about things around me.
6. My leisure activities provide opportunities to try new things.
7. My leisure activities help me to learn about myself.
8. My leisure activities help to learn about other people.
9. I have social interaction with others through leisure activities.
10. My leisure activities have helped me to develop close relationships with others.
11. The people I meet in my leisure activities are very friendly.
12. I associate with people in my free time who enjoy doing leisure activities a great deal.
13. My leisure activities help me to relax.
14. My leisure activities help relieve stress.
15. My leisure activities contribute to my emotional well-being.
16. I engage in leisure activities simply because I like doing them.
17. My leisure activities are physically challenging.
18. I do leisure activities which develop my physical fitness.

19. My leisure activities help me to stay healthy.
20. The areas or places where I engage in my leisure activities are interesting.
21. The areas or places where I engage in my leisure activities are very beautiful.
22. The areas or places where I engage in my leisure activities are well designed.

DEMOGRAPHIC QUESTIONNAIRE

23. What is your age:
- Under 25.....Mark A
 - 26-34.....Mark B
 - 35-44.....Mark C
 - 45-54.....Mark D
 - 55 and over.....Mark E
24. What is your sex:
- Male.....Mark A
 - Female.....Mark B
25. Which of the following applies to you:
- Single.....Mark A
 - Living with partner.....Mark B
 - Married.....Mark C
 - Separated, Divorced or Widowed..Mark D
26. How many years of education have you finished:
- 8 years or less.....Mark A
 - 9 to 12 yearsMark B
 - 1 or 2 years of college.....Mark C
 - 3 or 4 years of college.....Mark D
 - 5 or more years of college.....Mark E
27. What is your total annual income:
- Under \$8,000.....Mark A
 - \$8,001 to \$10,000.....Mark B
 - \$10,001 to \$14,000.....Mark C
 - \$14,001 to \$20,000.....Mark D
 - More than \$20,000.....Mark E
28. What is your primary method of communication with
other deaf people:
- ASL (includes Ameslan).....Mark A
 - Sign English/Manual English
(includes Ameslish, Siglish,
SEE #1, SEE #2 and LOVE).....Mark B
 - Oral (includes Speechreading)....Mark C
 - Written.....Mark D

29. What is your primary method of communication with hearing people:
- ASL (includes Ameslan).....Mark A
 - Sign English/Manual English
(includes Ameslish, Siglish,
SEE #1, SEE #2 and LOVE).....Mark B
 - Oral (includes Speechreading)...Mark C
 - Written.....Mark D
30. When did you become deaf:
- Born deaf.....Mark A
 - 0 to 4 years of age.....Mark B
 - Over 4 years of age.....Mark C
31. What degree of hearing loss do you have in your better ear:
- Mild (26-54 db).....Mark A
 - Moderate (55-69 db).....Mark B
 - Severe (70-89 db).....Mark C
 - Profound (90 or more db).....Mark D
32. How many organizations for the deaf do you belong to or visit:
- One.....Mark A
 - Two.....Mark B
 - Three.....Mark C
 - Four or more.....Mark D
33. What kind of organizations for the deaf do you belong to or visit:
- Church (such as First Baptist Church).....Mark A
 - Athletic (such as bowling, volleyball or softball).....Mark B
 - Social (such as Dallas Association of the Deaf, DAD).....Mark C
 - Services (such as Deaf Action Center, DAC).....Mark D
 - Other.....Mark E

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