NEURO-LINGUISTIC PROGRAMMING AS AN INTERVIEWING TECHNIQUE WITH PRELINGUALLY DEAF ADULTS

By

GERALD LOYD DAVIS, JR.

Bachelor of Arts
University of Oklahoma
Norman, Oklahoma
1973

Master of Arts
University of Oklahoma
Norman, Oklahoma
1975

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Thesis Approved:

Thesis Adviser

Dean of the Graduate College

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CHAPTER I

INTRODUCTION

Hearing loss is the number one handicapping condition in the United States. This disability is the single most prevalent chronic disability when compared with visual disorders, heart disease, or other chronic disabling conditions. The most recent national census, the National Census of the Deaf Population (NCDP) conducted by the United States in 1974, reported hearing impairment as the most frequent disability in the country affecting more than 13 million Americans (Schein and Delk, 1974). The term "hearing impairment" generally referred to the prelingually deaf and the hard of hearing population as well. (Prelingual deafness referred to the onset of deafness prior to language acquisition.) In Oklahoma, it was estimated that there were 270,000 hearing impaired persons, including approximately 30,000 as deaf. The number of significantly hearing impaired elderly individuals in Oklahoma was about 90,000, with about 5,000 deaf persons (Schein and Delk, 1974).

The Tulsa metropolitan area, the second largest population area in Oklahoma, had a significant population of severely hearing impaired individuals of over 38,000 and more than 5,000 deaf individuals, according to the NCDP (Schein and Delk, 1974). In addition, the census reported 23,036 persons as totally deaf, and 5,046 persons as prevocationally deaf (Schein and Delk, 1974). "Prevocational

deafness" referred to those persons who cannot hear and understand speech, and who had lost or never had that ability prior to the age of 19. The prelingually deaf group comprised a major portion of the so-called "prevocational deaf" group. Prevocational deafness became the term of preference in 1969 when the National Census of the Deaf was attempting to gather data focusing on the extreme end of the impairment continuum, while taking into account the degree of disability as well as the age of onset. Generally speaking, persons who were adventitiously deaf (acquiring deafness after speech development) usually retain this communication skill. Prelingually deaf children had greater difficulty acquiring speech, thus leading to educational deprivation and inadequate social experiences and, consequently, overall vocational and economic disparity.

Statement of the Problem

Problems to be addressed in this study are:

1. It was the express purpose of this study to investigate and identify the recreational activities and leisure needs of prelingually deaf adults.

2. This study also examined the Neuro-Linguistic Programming (NLP) model as an interviewing tool/technique, specifically with prelingually deaf adults.

3. This study also examined the effectiveness of NLP therapeutically and clinically as it related to mapping, recording, changing, and influencing behavior.

4. This study attempted to investigate the communication process of the prelingually deaf adult.

The prelingually deaf group was selected for this study because they, as a group, were either born deaf or became deaf prior to language acquisition (usually about age three). Their primary means of communication was manual or American Sign Language (ASL), with visual/motor mode normally utilizing both right and left hemispheres of the brain (Gunn, 1981). According to the NCDP, the estimated hearing impaired population in the United States was 13.4 million, and of those, 1.4 million were prelingually deaf (Schein and Delk, 1974). This particular segment of the hearing impaired population appeared to experience higher unemployment rates and considerably lower academic achievement levels, even when compared to the total hearing impaired population. The impact of the communication handicap appeared, upon first examination, to be most profound, relative to education and employment. Most of the research in the area of deafness had been confined to these two areas. A review of the literature revealed that little significant research had been done regarding leisure activities and needs of the prelingually deaf population.

The deaf population constitutes a minority group with potentially the same range of capabilities--intellectual, psychomotor, social, and vocational--found in the hearing population. However, some deaf persons lack the adequate skills for communication. The level of a deaf person's language skills depends primarily on appropriate educational opportunities and the age of onset of deafness. As indicated earlier, the prelingually deaf population was generally more disadvantaged than those who lose their hearing after acquiring basic language and speech ability. Many deaf people utilize sign language based on concepts, but a combination of homemade signs, fingerspelling, speech, writing,

and lip-reading skills are utilized in order to facilitate communication. However, not all deaf persons have, nor are experts in, any one of the aforementioned methods.

Communication handicaps not only create learning barriers, but also lead to social isolation. Stewart (1979) concluded that Public Law 94-142, requiring individual planning for the prelingually deaf child in the "least restrictive environment," is that in which the child is taught by teachers who are appropriately prepared. In this educational atmosphere, the child has the opportunities to learn communication, both expressively and receptively, to receive the appropriate socialization experiences, and to learn content material. Moores (1978) suggested that comprehensive support services and mainstreaming efforts could alleviate the education and economic disparity between deaf and hearing individuals. Furthermore, Stewart (1979) placed responsibility on graduate education training programs and professionals working with hearing impaired developmentally disabled persons for not adequately meeting the disabled individual's educational and social needs. Of course, the major problem in this regard is an overall lack of appropriate standards and information concerning the establishment of certification requirements. Without such standards, teacher and counselor preparation programs are uanble to identify required knowledge and skills necessary for the growth of appropriate degree curriculum being described and implemented. Perhaps the most viable approach in designing training programs and certification standards would be based on knowledge and skills of an individualized approach to the learning process (Moores, 1978; Stewart, 1979).

Need for the Study

The major problem faced by the deaf individual is that of communication. A significant number of deaf persons experience educational deprivation resulting in a lack of social, educational, physical, psychological, and vocational experiences and skills. Until recently, the deaf individual's educational experiences were residential in nature, and this, combined with a lack of appropriate social experiences, has resulted in communication barriers limiting the overall psychosocial development of the deaf individual. It has not been an uncommon experience for a deaf person to complete a high school education and yet remain nearly illiterate. In addition, those deaf individuals who have been misappropriately institutionalized are further deprived of learning experiences vital to successful and independent living. Quite often, deaf individuals come in contact with community professionals, service workers, and educators who lack communication skills to meet and understand individualized needs, thus compounding the communication handicap. For example, in Tulsa, Oklahoma, there are over 100 programs and organizations providing human services, and only three of those programs employ staff members who are able to communicate and interpret for the deaf and hearing-impaired population (Community Service Council of Tulsa, 1982).

Education for deaf individuals has greatly improved over the past decade. Residential schools continue to be effective, especially with special groups of multisensory impaired and/or multidisabled individuals. On the other hand, mainstreaming with appropriate support services presently appears to be the preferred educational practice, both by parents and educators.

Perhaps the most controversial issue regarding education of the deaf individual is the type of communication method to be used. There are many types of manual communication systems originating from ASL. Regardless of the criticism of ASL, Fant (1976) contended that ASL, otherwise known as "Ameslan," was a true language in itself. Its structure, semantics, and pattern of change follow the same laws as all other human languages. He is critical of current educational curriculum for not emphasizing ASL and not giving it the respect and attention it is due. He believed ASL could be instrumental in bridging the educational gap demonstrated by low competency levels of deaf persons in English and other related areas.

Moores (1978) pointed out that, in the past, the curriculum in programs for deaf children was designed to teach or develop the English proficiency, which is the same approach used with hearing children. However, because deaf children are unable to utilize their audition, learning English is extremely laborious and inefficient. Moores suggested a total communication approach; i.e., utilizing both the manual and oral methods of communication.

Recent trends in educational methods and the strengthening of civil rights laws have prompted a rapid expansion of social services and recreational opportunities for deaf and hearing impaired individuals. Yet, most helping professionals, as well as leisure specialists, are currently unable to provide quality services because of a fundamental barrier--the inability to communicate with the client. Because NLP is a sensory-based communication model with non-verbal components, its application to the field of deafness is plausible. However, the possibility of its usefulness remains untested. A need

exists to study the application of NLP to social service delivery and leisure planning and to evaluate its effectiveness as a communication tool.

Purpose of the Study

Communication is the number one handicapping factor confronting hearing impaired individuals. In particular, prelingually deaf individuals experience educational, social, recreational, emotional, and vocational deficits resulting primarily from poor communication skills and low academic levels. Improperly trained educators and/or professionals directly involved and working with the deaf population compound and worsen the communication handicap. It was the purpose of this study to investigate and identify the recreational activities and leisure needs of prelingually deaf adults. It was anticipated that the results would produce specific information pertinent to providing the individual with appropriate educational, social, and leisure programming experiences.

NLP, a communication model designed by Grinder and Bandler (1976), was utilized as the primary interviewing tool/technique. This study also examined the NLP model as an interviewing tool specifically with prelingually deaf adults. Furthermore, the affectiveness of NLP therapeutically and clinically as it relates to changing or influencing behavior was also examined and discussed. Overall, this study provided initial groundwork investigating the efficacy and use of NLP in enhancing communication educationally, socially, emotionally, recreationally, and vocationally.

This study also provides basic information about prelingually deaf persons' recreational activities and leisure needs. Research in this area has profound effects regarding appropriate programming in areas from education to employment. A "case study" methodology was appropriate, as both NLP and leisure needs of prelingually deaf individuals explore "new territories," and therefore require a period of observation and information gathering prior to attempts to standardize results. Process information was based on the NLP model, and results were recorded using NLP structure and terminology. The results of this study were necessarily descriptive in nature, since there were neither standardized tools evaluating the use of NLP as an interviewing technique nor specifically designed psychometric, psychological, or leisure assessment tools for prelingually deaf individuals.

In general, the purpose of this study was an attempt to investigate the communication process of the prelingually deaf adult and to provide data regarding specific leisure needs of this particular group. As indicated earlier, the results of this study provided the initial ground work for examining NLP as an interviewing technique/tool. It was the first study utilizing NLP and examining the leisure needs of prelingually deaf adults, therefore providing relevant educational, social, psychological, recreational, and vocational information to professional workers with the deaf and hearing impaired consumer. Furthermore, the results of this study provided data to study, examine, and develop standardized methods for evaluating NLP as an interviewing technique. It should stimulate further research and development of leisure assessment tools specifically for the prelingually deaf population. Finally, it was anticipated that once the

data had been completed it would be examined for possible significance relative to education, leisure, and employment of prelingually deaf adults.

Definition of Terms

Terms used in this study are defined as follows:

Accessing Cues: Eye scanning patterns (Lankton, 1980).

American Sign Language (ASL): Manually coded sign communication system which is considered the primary language of the deaf culture (Padden, 1980).

Lead System: The sensory modality through which information is initially processed and occurs without direct consciousness and is usually nonverbal (Gunn, 1981).

Change Work: Changing behavior to a specific outcome.

Adventitious Deafness: The condition in which a person acquired deafness after language had been established.

Four-Tuple: A set with four members, V-Visual, K-Kinesthetic, A-Auditory, and O-Olfactory, and is a way of representing a person's sensory experience at a specific moment in time (Bandler and Grinder, 1979).

Neuro-Linguistic Programming (NLP): The study of the structure of subjective experience which recognizes that behavior is programmed by combining and sequencing neural system representations of sights, sounds, feelings, smells, and tastes (Gunn, 1981).

Prelingual Deafness: The condition in which a person acquires deafness prior to language acquisition (Shaul, 1981).

Prevocational Deafness: The condition in which a person cannot hear and understand speech and who has lost or never had that ability prior to age 19 (Shaul, 1981).

Limitations

The study was limited because of the researcher's ASL skill level. Also, constraints were imposed on this study due to the researcher's lack of time, money, and resources.

CHAPTER II

REVIEW OF THE LITERATURE

The review of the literature had been divided into the following sections:

1. Leisure Programming and Recreational Activities for Deaf Persons.
2. Education and the Hearing Impaired Student.
3. Impact of Title V, Section 504 of the Rehabilitation Act of 1973 on Education.
4. Community Resource Centers.
5. Athletic Opportunities for Deaf Individuals.
6. Neuro-Linguistic Programming: A Communication Model.

Leisure Programming and Recreational Activities for Deaf Persons

The importance of recreational activities and leisure programming has become increasingly important to the overall psychological/social development of the deaf individual. It is important that leisure professionals recognize the unique leisure needs of the special group that comprises the most prevalent physical disability in the world today (Shaul, 1981). In 1974, the NCDP identified 13.4 million persons with a hearing impairment, of whom 1.8 million could be classified as prelingually deaf (those persons who could not understand

speech and had lost the ability prior to language acquisition). Because of the large number of deaf and hearing impaired consumers, it is important that leisure programs be structured to meet the individual's and community's unique needs.

Each person must be studied individually in relation to the environment, assessing his/her leisure needs accordingly. For the most part, the average deaf child's hearing impairment is not identified until he/she has failed to acquire language. Often, parents of hearing impaired children are not concerned about their child's lack of language until the third or fourth year of age. The specific ability to develop language appears to peak around the ages of three or four; it tends to decline steadily thereafter (Moores, 1978). Therefore, it is imperative that the deaf child obtain some type of language instruction, not at the ages of six, five, or four, but as soon as the loss is diagnosed.

It is equally important that all children, regardless of ability or disability, be permitted to develop at their own pace. The deaf child's conception of preschool is somewhat clouded by the communication problems, as the majority of the deaf children (90%) are born to hearing parents who, for the most part, do not learn to communicate with their children (Shaul, 1981). In fact, Schlesinger and Meadow (1972) found mothers of preschool deaf children to be significantly less permissive, more intrusive, more didactic, less creative, less flexible, and showed less demonstrative approval for their children. Thus, the importance of play becomes a critical factor in the social and psychological make up of the individual. The play experience influences the child's total growth. The natural state of play behavior

helps strengthen muscles, develops coordination and senses, stimulates creativity, aids in problem solving behavior, and develops attitudes, emotions, and feelings. Issacs (as cited in Stensrud, 1976), a British educator, observed children's unstructured play behavior and generalized that play leads to discovery, reasoning and thought; play is the bridge to social relations and helps establish emotional equilibrium.

The lack of effective communication for the first five years has tremendous implications for later psychological/social and educational development. The absence of language prevents the hearing impaired child from gaining the factual knowledge of the world needed to cope with and manage his/her environment. In fact, many of these youngsters are misdiagnosed, then labeled and treated as mentally retarded, aphasic, autistic, brain damaged, or schizophrenic. Of course, language deprivation coupled with misdiagnosis can and does lead to drastic psychological and social effects.

Therefore, the hearing impaired child's functionability in a hearing world is determined by the age of onset of hearing loss, proper diagnosis, and proper leisure programming. Without appropriate experiences regarding language acquisition, education, psychological and social development, the hearing impaired child's opportunities in the area of leisure education and career pursuits appear limited and bleak.

Even though education is of primary importance, it is not a sole concern. Children need to enjoy themselves, to play, and to create. Children with disabilities now have the right to education as well as the right to their own importance of recreation, leisure, and physical

education as reflected in Public Law 94-142, the Education of All Handicapped Children Act of 1975: "Physical education must be an integral part of the education of every handicapped child specifically designed, when necessary" (n.p.). The law continues by stating that schools "must take steps to afford handicapped children equal opportunity for extracurricular services and activities" (n.p.). This law has done much in establishing Individualized Educational Programs (IEP) that will hopefully insure the disabled individual's opportunity for leisure experiences required for positive social growth.

As Vernon (1969) pointed out, the deaf community has begun to take responsibility for meeting their needs, especially in the area of leisure. The National Association for the Deaf, for example, has in excess of 10,000 members across the United States, with chapters in every state. A permanent national headquarters in Washington, D.C. hosts national meetings on a regular and timely basis (Vernon, 1969). However, the efforts of the deaf community alone are not enough to meet their leisure needs.

Education and the Hearing Impaired Student

Historically, disabled people have generally experienced problems of accessibility to educational programs at the elementary, secondary, and postsecondary levels. Legislative efforts have produced significant progress promoting equal participation in educational programs by disabled students. In particular, public education received a Congressional mandate from the passage of Public Law 94-142 requiring "free and appropriate public education" for all handicapped children in the "least restrictive environment" (n.p.). While this

law addresses and impacts public education at the elementary and secondary levels, no provisions were included in the Act to address the needs of the disabled postsecondary student nor the responsibilities of the institutions to provide educational opportunities and services. However, Title V, Section 504, of the Rehabilitation Act of 1973, otherwise known as the "bill of rights" for disabled people, provided the impetus for postsecondary educational reform by requiring access, both architectural and programmatic, to the educational process (HEW Task Force on Public Awareness, 1977).

As early as in 1817, education efforts for deaf persons were focused primarily on providing vocational and technical skills for employment-related concerns. With the exception of Gallaudet College in Washington, D.C., there were no postsecondary institutions available for the deaf before World War II. Thus, the lack of educational programs to meet the academic needs of deaf individuals led from deterioration of general economic parity with their hearing counterparts to economic inferiority by 1950. Postsecondary opportunities for deaf persons witnessed no changed from 1864 to 1964. With Gallaudet College's accreditation in 1958, and the establishment of other postsecondary institutions since that time, the deaf person has more opportunities for advancement in education and in the world of work (Moores, 1978).

The National Technical Institute of the Deaf (NTID) located in Rochester, New York, at the Rochester Technical Institute, was authorized by Congress in 1965. The first class opened in 1968, and since that time the majority of students enter a vestibule program offering career information, technical mathematics, science, English, and

personal and social adjustment. Training may lead to a certificate of achievement, associate, and baccalaureate degrees. NTID is viewed as Gallaudet College's technical counterpart and numerous support services are available. These include tutoring, notetaking, vocational, personal, and social counseling, training in speech and manual communication, supervised housing, and vocational placement (Moores, 1978).

Furthermore, the establishment of federally funded regional centers of vocational programs for the deaf has provided much impetus and impact on curriculum change for hearing impaired students. The prototype provides postsecondary training to hearing impaired postsecondary students at existing colleges and vocational-technical programs. However, a recent survey at NTID of student competency level indicated that deaf students are generally below the prerequisite competencies as they relate to the general education curriculum. Because of low competency levels, there is an increased need for curricula to be designed in order to meet the learning needs of deaf students. Currently, such programmatic planning and implementation is taking place at NTID (Smith, 1980).

It is not surprising that the competency levels are low, considering that deaf children generally fall behind hearing norms in written language and reading. This, of course, impacts academic achievement in other areas that require the knowledge of English. However, evidence suggested that hearing impaired students were as capable as their hearing counterparts intellectually and could handle cognitive demands with the appropriate support services (Moores, 1978). Approximately 50% of all deaf and hearing impaired students graduating from high school enroll in postsecondary education programs

(Stuckless, 1981). The hearing impaired students enter the postsecondary educational process and have support services ranging from almost none to comprehensive in nature. As demonstrated by the Consortium Advisement Program in 1981, deaf undergraduates demonstrate successful competition with hearing counterparts in other universities as long as the full range of support services are provided (Kerstetter and Fritz, 1981).

In general, the hearing impaired student is confronted by a variety of handicapping barriers in the educational process. Because of the age of onset of the disability, type, and severity of hearing loss, educational background (whether it be residential or otherwise), there is no established methodology for effectively advising and meeting the needs of hearing impaired students. An individualized approach appears to be the most beneficial in terms of program planning, and this approach produces the greatest amount of success for the individual student in the postsecondary institution.

Impact of Title V, Section 504, of the Rehabilitation Act of 1973 on Education

Title V, Section 504, of the Rehabilitation Act of 1973 mandated equal access to all postsecondary educational programs and put an end to discrimination on the basis of handicap regarding recruitment and admissions. Even though the bill was signed in 1973, it did not become effective until 1977, and its impact is only now being fully realized. Title V had four sections which covered all types of activities involving federal funds. Section 501 required federal agencies to implement affirmative action programs to hire and promote qualified

handicapped persons. Section 502 authorized Architectural and Transportation Barriers Compliance Board with enforcement of building accessibility. Section 503 required all businesses and other organizations contractually providing goods or services to the federal government to have affirmative action programs to hire and promote qualified handicapped persons. Section 504 prohibited discrimination against qualified disabled persons as employees, students, and consumers of services by "all public and private institutions receiving federal funds" (HEW Task Force on Public Awareness and the Disabled, 1977, p. 3).

While the Education for All Handicapped Children Act (EFAHC) or PL 94-142, and Section 504 of the Rehabilitation Act of 1973, offered the major legislative framework for educational efforts of handicapped youth and adults, the two differed significantly in focus, scope, and philosophy. EFAHC addressed only elementary and secondary education programs and required the development of "individualized education plans" around the individual student's special needs. On the other hand, Section 504, as it affected postsecondary education, required architectural modifications and auxiliary aids to ensure the disabled students' physical and programmatic access to existing educational curriculum and related services. In short, one required the planning of curriculum and education programs around individual student needs, and the other required postsecondary institutions to assist in the adjustment of students to existing programs (Bishop, 1982).

Additionally, while EFAHC only addressed educational opportunities, Section 504 addressed all activities of the institution, including admissions, employment of faculty and staff, capital improvements

and building construction, as well as educational services and extra-curricular activities. Section 504 required the analysis of programs and services and surveys of existing architectural barriers that may limit a handicapped person's access to classrooms, offices, dormitories, libraries, and research facilities. This self-evaluation plan identified the ability of the institution to assess equal educational opportunities for disabled students.

Postsecondary institutions were also required to develop a time frame for removing architectural barriers and providing auxiliary support services. This transition plan constitutes the course of action for the institution to guarantee equal educational and employment opportunities to handicapped students and workers (Bishop, 1982).

Various guides had been prepared in order to assist colleges and universities in compliance with Section 504. These guides and handbooks gave technical assistance aimed at providing colleges and universities with information about appropriate attitudes, organization of accessibility programs, student programs, campuses, activities and services, employment, and implementation of plans. In general, they provided colleges and universities with the information necessary to provide opportunities for full participation by handicapped students in colleges and universities (Biehl, 1978).

In addition to printed models and compliance guides, consultant and technical assistance services were available, both nationally and locally, to assist in program planning, architectural design, and voluntary compliance with Section 504. The Department of Health and Human Services Regional Technical Assistance Staff and the Oklahoma Office of Handicapped Concerns were two such services that provided

assistance to vocational and technical schools and other institutions of higher education attempting to provide better educational services to handicapped students.

In general, compliance with Section 504 could be partially evidenced by the publication of the 1981 Handbook for Colleges and Universities: Educational Opportunities for Handicapped Students on how to successfully serve handicapped students. Of particular importance, the handbook presented possible solutions to existing problems, ranging from minor architectural changes to comprehensive programmatic revisions. Comprehensive revisions and changes could be costly, but colleges and universities had been able to find necessary funding sources in order to implement such changes. In summary, the handbook was primarily designed to reflect the success of colleges and universities in their attempts to solve the special problems presented by the handicapped student and the potential for replication of such programs on other college campuses (Tickton, Kinder, and Foley, 1981).

Community Resource Centers

Recreational opportunities and leisure activities for deaf individuals have been primarily limited to informal organization and structure. The importance of play and recreation in the deaf person's developmental process as related to socialization, education, and psychology, tends to have been overlooked by parents and professional workers of the deaf, including teachers, counselors, and leisure educators. Presently, community resource centers provide the deaf consumer with leisure programs aimed at creating quality leisure experiences. During the past few years, the problems of deafness

imposed upon individuals have finally been recognized, and steps are being taken to alleviate them (Walker, 1974). Increased legislation, concern, and awareness have resulted in better informed and trained persons working within the deaf community, as well as in better equipped facilities for the deaf consumer. Unsatisfactory services from the general social service agencies have been a result of too few professionals who can communicate and understand the individual deaf person's needs. Therefore, establishment of formal community service centers structured to meet the needs of the deaf individual and community is of vital importance to the total person's physical, mental, emotional, and social growth. The structuring and provision of leisure programming at these centers can provide much-needed communication instruction to both the deaf and hearing population. Adult education and continuing education courses can provide information in the areas of general health care, child care, medical services, vocational rehabilitation, employment, training opportunities, personal awareness, leadership training, and counseling. Also, other recreational activities such as theater, sports, and local organization meetings combine to provide an overall quality leisure for the deaf individual.

The Southwest Center for the Hearing Impaired, located in San Antonio, Texas, is an excellent example of a continuing education center for adults where the importance of recreation in the development and mainstreaming of hearing impaired individuals plays a significant role. The center, which is residential in nature, encourages participation in recreational/social activities such as mixers, parties, church services, sports, and games. Their brochure points out:

"Participation . . . assists residents to develop communication skills, improve interpersonal relationships, and associate with deaf staff who serve as positive role models" (Southwest Center for the Hearing Impaired, 1983, p. 11).

In addition, daily outings for residents are sponsored by the residential staff. These activities include shopping trips, league sporting events, and club meetings in greater San Antonio. "Mini-vacations" to such places as state parks and amusement parks are also a part of the "play" activities.

> The purpose of all these activities are manyfold and are of the utmost significance in the participant's total rehabilitation process--broadening the individual's social horizons, providing the participant with opportunities to interact and compete equally with other deaf and hearing adults, obtaining knowledge of services offered in the community and actually using some of the skills the participant has learned and developed at the center out in the 'real world' (Southwest Center for the Hearing Impaired, 1983, p. 3).

Gallaudet College in Washington, D.C., is another example of a primarily "educational" facility that has realized the importance of recreation in the development of the deaf individual. Campus life at Gallaudet College is much like that of any other college in the United States. Athletics, for example, plays as important part in the fully-rounded hearing impaired student's life as it does for hearing counterparts. At Gallaudet College, the Athletic Council oversees athletic programs and helps institute any new policies concerning athletic competition. Intercollegiate sports have been a major force at Gallaudet since 1880, and the college is a member of the National Collegiate Athletic Association and the Association of Intercollegiate Athletics for Women (Gannon, 1981). Varsity sports include basketball

volleyball, bowling, track and field, tennis, swimming, hockey, football, softball, baseball, cross country, soccer, and golf. In addition, there are numerous intramurals, many of which are coeducational.

In addition to athletics, there are numerous other clubs and activities that enrich the lives of hearing impaired students at Gallaudet College. There are currently eight active fraternities and sororities, ranging from Phi Kappa Zeta Sorority, founded in 1892, to Alpha Phi Omega, a coed fraternity founded there in 1976. The student also has access to some 15 organizations and clubs, covering a wide variety of interests, from cheerleading (The Bisonettes) to modern dance and bowling.

Honor societies also have a major influence on campus life and activities, as does the work involved with the college's publications, Gallaudet Today and the Gallaudet Alumni Newsletter. "Phi Alph Pi is the scholastic honor society of the college. Seniors, with academic averages of 3.30 or above and at least 2.80 for their freshmen and sophomore years, are nominated for membership" (Gallaudet Undergraduate Catalog, 1981, p. 23. However, only 10% of the senior class is eligible for membership.

For the hearing impaired individual, campus life at Gallaudet is extremely important because of the fact that it is the greatest single influence on the hearing impaired and deaf community in the United States. Many of the major advances which have affected the hearing impaired community during the 1960's began at Gallaudet.

Creative programming of recreation and leisure activities for any special group is of the utmost importance. The success of such programs depends primarily on the planner's ideas and creative abilities

to plan programs and to meet the needs of special populations in order to provide these special groups with quality leisure services. Stensrud (1976), an Assistant Professor, Recreation for Special Groups, California State University (Chico), placed the emphasis for creative planning on leisure educators and other professionals working with special populations:

> Our creative abilities are taxed in order to help individuals surmount their various limitations so they can fully participate in recreation experiences. We have to approach motivation, planning, leadership, and implementation with creativity to help assure successful leisure experiences for special populations. Our creativity is also needed to help surmount a multitude of other limiting factors such as staffing, facilities, transportation, funding, equipment or any other factor that can be considered a fiscal, physical or attitudinal barrier (p. 3).

Athletic Opportunities for Deaf Individuals

One of the most prominent areas of recreational opportunities for socialization of the deaf person is sports. Postsecondary football became extremely important as a means of recreational/socialization for the deaf in many schools for the deaf around the early 1900's. In the 1890's, Gallaudet College had begun playing football and were the undisputed city champions for the Washington, D.C., area. Aside from teaching sportsmanship and the importance of being team members, other equally important individual benefits developed from the experience. As Gannon (1981, p. 276) pointed out in Deaf Heritage: A Narrative History of Deaf America: "Five members of the college's first officially-organized football team in 1883 later became presidents of the National Association of the Deaf."

Reading any of the history of football in the United States makes one aware of the impact it has had on the hearing portion of our society. The nonhearing, however, have shared in that fervor and have worked diligently to leave their marks on the annals of football history. Since 1903, there have been well over a thousand interschool football contests for the deaf, and within that realm, the sports editor for The Deaf American lists 64 football teams dating back to 1909, which have gone undefeated (Gannon, 1981).

However, to dwell on football as being the major source of sports recreation is a bit unfair, as there are other sports which have received as much, if not more, support from the deaf community. It has been suggested that bowling attracts more deaf men and women to its local, state, and national competitions than any other sport. The oldest and largest bowling tournament in the United States is sponsored by the Great Lakes Deaf Bowling Association.

Basketball is another sport in which the socialization/recreational outlet for the deaf individual has been extremely successful. As early as 1904, basketball was being introduced in the United States as an intercollegiate sport for the deaf. In 1931, the Nebraska School for the Deaf was the first to win a state basketball championship, and the Arkansas School for the Deaf followed suit in 1949. At the present time, six regional tournaments for schools for the deaf are held annually (Gannon, 1981).

Football, basketball, and bowling are only the most prominent of sports, but it is important to realize that there are many other areas of athletics in which deaf consumers not only participate, but excel.

Other areas, such as theater, drama, wrestling, boxing, racing, and others too numerous to mention reflect the same success that deaf persons have enjoyed in recreational activities. The importance lies in the fact that the personal qualities developed by the individual while participating in recreational leisure activities are extremely valuable components of a well-integrated and socially oriented deaf person. The quality of leisure lifestyle; that is, the time spent in play, whether it be sports or not, therefore is extremely crucial in the overall development of the total individual.

Effective Communication With Deaf Persons

Effective communication is of paramount importance in gathering social data or in counseling with deaf individuals. Stewart (1979) suggested that the nature and principles of counseling with deaf consumers were no different from those characterized by counseling with other people, with the exception of implementation. Because the field of deafness as it relates to counseling, family therapy, and psychotherapy is relatively new, little information exists as to particular techniques or methods available. However, a review of the literature revealed a consistent need for effective and clear communication between the counselor and the deaf client. Hoyt, Sielgman, and Schlesinger (1981), after interviewing 10 therapists and supervisors who had clinical experience in working with deaf patients, reported that the indicated focus of special-issue areas related to the necessity of visual rather than auditory communication. Furthermore, Hoyt et al. emphasized other issues such as problems with diagnosis and assessment, therapist and patient expectations, special strengths of

deaf patients, third party involvement (use of the interpreter), and modifications of therapeutic technique.

The therapeutic process has traditionally been a one-to-one relationship between two individuals. The use of a third party or certified interpreter presents a serious challenge to this relationship. Harvey (1982) supported the use of the interpreter in the provision of therapy to deaf children with hearing parents and offered the following reasons:

> First, even though a therapist may be fluent with manual communication and certified as an interpreter, it is the author's opinion that it is often not feasible or therapeutically prudent to interpret for all of the family members while simultaneously providing treatment. Thus, in this case, the interpreter would facilitate communication between the deaf and hearing members of the family. Second, the presence of an interpreter can be effectively utilized as an intergral part of the therapeutic process. . . . An interpreter affects the interaction in many subtle yet important ways. Thus, rather than viewing the interpreter as a necessary 'nuisance,' the therapist can view the interpreter as part of the family system and use his/her presence to therapeutic advantage. . . . (p. 281).

Curtis (1977) recognized the need for effective communication with deaf clients and suggested that therapeutic success was contingent on how well the individuals understood one another as well as their ability to express themselves. Ideally, the therapist/counselor would have the skills necessary for effectively communicating with deaf consumers without the use of third party involvement. Hoyt et al. (1981) maintained that until more professionals in all fields serving deaf people have the necessary communication skills, the use of additional resources, and revision of traditional therapeutic techniques, further research will be required in order to meet the specific needs of this underserved population.

Neuro-Linguistic Programming: A Communication Model

Neuro-Linguistic Programming (NLP) is a communication model developed in 1975 by creative modelers, Grinder and Bandler (1977). NLP is the study of the structure of "subjective experience" which is based on intersecting theoretical fields, including linguistics, cybernetics, psychotherapy, and personality theory. In her article "Neuro-Linguistic Programming: A New Horizon in Leisure Counseling," Gunn (1981b) defined and characterized NLP in the following way:

> NLP may be defined as the study of the STRUCTURE of subjective experience. Leisure professionals are directly interested in studying the structure of the leisure subjective experience. The NLP process is suggested by its name: 'Neuro' recognizes that all behavior is the result of neurological process. 'Linguistics' recognizes that neural processes are represented and sequenced into models and strategies through language and communication systems. Finally, 'programming' is the process or reorganizing these sensory representatives to achieve specific outcomes. NLP recognizes that behavior is programmed by combining and sequencing neural system representations of sights, sounds, feelings, smells, and tastes. An external stimulus is processed through internal representations, and a specific outcome is generated. NLP contends that these five sensory experiences are the basis for the strategies we have for generating and guiding behavior, rather than the more complex and generic or abstract concepts such as ego, mind, human nature, morals, reason, etc. employed by other theories or therapeutic methods. NLP succeeds by dealing effectively with the subjective rather than the objective experience. It is more concerned with form than with content. Because it concentrates on form, NLP is freed from attachment to a particular behavioral content and can concentrate on the underlying processes that govern behavior (p. 2).

Presently, NLP is a multipurpose model aimed at successful communication relative to all human relationships. The NLP model purports to provide one with a "structure of experience" by utilizing sensory-based information to observe and understand sequences, patterns, and

body movements, as well as to detect changes in minimal cues such as breathing, lip size, skin color, heart rate, etc. Therefore, it is the "structure of experience" which is considered to be the "key" to effective communication (Dilts, Grinder, Bandler, DeLozier, and Cameron-Bandler, 1979).

Bandler and Grinder (1979) contended that focusing on content, that is "words" used by the client to explain internal experience, only confused the issue, and jokingly suggested that therapy could be conducted in a foreign language unknown to the therapist in order to erase the illusion that "words" mean the same to all people. In this way, the therapist would not misunderstand what is being said and that the internal/subjective experience, which is content-free, is the information required for change to occur. The structure of the internal experience is unique for each individual, and unsuccessful as well as successful strategies can be observed, mapped, and replicated. This could be a valuable tool in the "change work," as it allows one to objectively experience and understand the client's internal experience.

Observing a person's eye scanning patterns in relationship to other body and nonverbal cues is almost computer-like, as though data were being entered on a terminal. This analogy is appropriate, as the structure of a given internal experience can be systematically coded, and therefore reproduced at any point in time. This, of course, does not eliminate or lessen the importance of human understanding, sensitivity, caring, etc. by the therapist during the change work period, but does offer an additional tool for understanding the entire communication process.

Much like any model of human experience, NLP is designed to be specific and empirical. It is based on sensory data--what we can see, hear, feel, taste, and smell. Basically, NLP is content free and specific criteria produces effective results, whether therapeutic in nature or to improve communication in general (Grinder and Bandler, 1976). This model of communication is based on the assumption that people communicate initially through sensory input channels of sight, audition, feelings (both visceral and tactile), gustation, and smell. These sensory-based processing channels are recognized as lead or input systems. The lead system is generally the sensory modality through which information is initially processed and occurs without direct consciousness and is usually nonverbal (Gunn, 1981b).

The direct expression of this internal/subjective experience is referred to as a primary representational system and is generally the sensory processing channel of which the person is conscious and aware. For the nonsensory impaired individual, the primary representational system can be identified by predicates (process words: verbs, adverbs, adjectives) used to represent internal experiences, syntax, body positioning, and tonality (Bandler and Grinder, 1979). The lead and representational systems are generally reflected by the use of the four-tuple notion which represents a person's sensory experience at a specific moment in time. Specifically, the four-tuple system is a way of visually noting the form of the internal experience (Lankton, 1979). It is expressed and abbreviated by V, K, A, and O for the major sensory channels: Visual, Kinesthetic, Auditory, and Olfactory/Gustatory. Detection of the lead and representational system is by

visually attending to the following accessing cues or eye scanning patterns (Table I).

TABLE I

THE FOUR-TUPLE SYSTEM

Accessing Cues	Lead and Representational Systems	
Eyes up and to the left	Remembered imagery (old pictures)	V^R
Eyes up and to the right	Constructed imagery (new pictures)	V^C
Eyes defocused (straight ahead)	Remembered or constructed imagery	V
Eyes down and to the left	Auditory or internal dialogue	A_d
Eyes to left (ear level)	Remembered auditory (old tapes)	A^R
Eyes to right (ear level)	Constructed auditory (new tapes)	A^C
Eyes down and to the right	Kinesthetics, feelings or olfactory	K

These categories generally apply to normally organized right-handers and for left-handers they are usually laterally reversed (Lankton, 1979). Generally, the lead system is identified by "accessing cues" (eye movements, breathing, color, and tonal changes). The primary representational system is identified by observing body size and tension, predicates, syntax, and body positioning.

NLP purports to provide the practitioner with a useful model/map of the total communication process related to internal/subjective experience. Gunn (1981b) suggested that this model is easily replicable and offered specific strategies for change work in the leisure

counseling area, including leisure reframing, leisure preference loops, leisure history changes, etc.

In reference to change work, Dilts et al. (1979) and Gunn (1981b) provided the following list as presuppositions underlying the understanding and the overall effectiveness of NLP on changing behavior:

1. Anything that happens in one part of a cybernetic system (such as a human being) will necessarily affect all other parts of that system. Any change in any part of a system will alter the outcome response of that system.

2. All forms of behavior are communication and are important to understanding the needs of the client. An organism cannot not communicate or respond, though most of the response is non-verbal.

3. All behavior (from language, to skin color changes, rates of breathing, hand gestures, body posture, eye movement patterns, head posture, etc.) is a transformation of internal neural processes and therefore carried information about those processes.

4. All behavior is, or was, adaptive and useful to achieving necessary outcomes in the context in which it was learned.

5. Though surface or presenting behavior may be maladaptive or unuseful, presently, the original intent for generating the behavior was positive; e.g., though smoking may currently be harmful to the body, the intention for smoking (relaxing, including someone socially asserting oneself, etc.) is positive.

6. It is useful to have multiple choices about achieving outcomes. NLP does not seek to extinguish behaviors, but rather to add far more satisfying choices about behavior.

7. Unconscious choices are far more consistent and useful than conscious choices. The skills required for driving a stick shift car operate far more effectively when we don't have to think about them.

8. Everyone (including most handicappers) have all they need to structure and restructure useful behaviors. Our job is more one of assisting people in structuring and re-organizing the structure of their experience (p. 5).

In summary, NLP is a communication model relative to all human beings. Its direct application involves providing various problem solving, as well as other communication-based strategies leading to clearer understanding of the internal/subjective communication process. This model is specifically designed to allow for easy replication and recreation of observable peak performance behavior. Similarly, certain learning problems may be easier mapped and understood and more reasonable communication strategies could be developed, focusing on the individual's particular needs. Therefore, a model has been provided in order to manage, understand, and organize behavior in a systematic fashion. More importantly, alternative ways of observing, thinking, evaluating, interpreting, and understanding human behavior have been provided.

CHAPTER III

METHODOLOGY

The purpose of this study was threefold in nature. First, the study centered on the investigation and reporting of data regarding leisure, social, and recreational activities and needs of prelingually deaf adults. Of major concern in this regard was the deaf individual's educational, social, emotional, and vocational adjustment in relationship to appropriate play experiences and leisure programming activities. Second, the study focused on Neuro-Linguistic Programming, the model or tool utilized in gathering and reporting of data. This communication-based interviewing model was selected because its clinical approach offered a replicable model in addition to having sound theoretical principles. Furthermore, this interviewing method was communication oriented and focused on verbal and nonverbal forms of communication. NLP and the application of its techniques has been more involved with calibrating/observing process (nonverbal cues) information relative to the individual's view or representation of the world than it has with content (verbal cues) information. Generally speaking, a focus on content information has led to labeling, judging, and diagnosing particular rhetoric and behavior according to a given theory (Lankton, 1979). Of course, the content information has had importance in that it has represented the individual's map of his/her subjective experience. Content information for the prelingually deaf

person utilizing ASL or some other sign system could be observed and noted manually and not verbally.

Finally, this study investigated calibrating, mapping, and replicating strategies relative to successful, peak-performance behaviors of five prelingually deaf adults. Eye scanning patterns were the basis for mapping particular experiences. In addition, other sensory based process information, including posture, movement, skin color, lip size, breathing changes, etc., was noted while mapping strategies.

Sample Group

The subjects of this study were five prelingually deaf adults who were or had been involved with various social service agencies, both public and private. The subjects consisted of three males and two females, with the average age being 37 years. The volunteer subjects were residents of metropolitan Tulsa, Oklahoma, and surrounding northeastern communities.

Methods and Procedures

A case study approach was chosen as appropriate methodology in view of the population being studied and the instrument used in gathering data. This researcher and another general skilled state certified interpreter for the deaf conducted in-depth interviews with each of the five subjects volunteering for this research project. Background information, including educational, social, familial, recreational, and vocational areas, were investigated and results were recorded. Each subject was asked a series of questions, and both

process and content information were recorded separately by both interviewers. A format of these questions (see Appendix) proved to be important in that it provided much needed structure during the interview periods. Process information was based on the NLP model and the results were recorded utilizing NLP structure and terminology. In particular, "successful" and "stuck" strategies were elicited from each of the subjects and their responses, both content (manually coded information) and process (eye scanning patterns) were noted and recorded.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Introduction

As previously indicated, the major research questions in this study were:

1. What are the recreational activities and leisure needs of prelingually deaf adults?

2. Can Neuro-Linguistic Programming be a useful communication tool and prove effective as an interviewing model for prelingually deaf adults?

3. Can a prelingually deaf person's strategy related to "successful" and "stuck" behaviors be mapped according to access cues/eye scanning patterns?

The results and analysis of data collected will be presented in this chapter.

Collection of Data

Five prelingually deaf individuals volunteered for this study and were involved in in-depth interviews with this researcher. Interpreter services were utilized to assist with gathering both process and content information. A certified interpreter recorded content information and assisted with the mapping of "successful" and "stuck"

strategies. The participants consisted of three males and two females, with the average age being 37 years. Each participant was asked a series of questions concerning personal, disability, educational, vocational, and recreational data.

The data collection instrument utilized was designed to collect data in a systematic and organized fashion, facilitating the gathering and reporting of both content and process information. Process information was recorded using NLP structure and terminology. Each individual provided data regarding "successful" and "stuck" behaviors and particular eye scanning patterns were mapped and recorded.

Case Summaries

The following case summaries are divided into content and process sections for ease of presentation and analysis of data:

Participant #1

Content. Phil was a 45 year old, white, married male with two children, age 16 and age 13. He had been married to the same woman for 20 years. He described his life as good and happy. He had a good relationship with his wife and children. Both he and his wife were deaf, and his children had normal hearing. He indicated that he had no problem communicating with his children and had the normal complaints and difficulties that most parents have in dealing with children. He indicated that he and his wife have had problems related to financial conditions, but their love and support for each other was strong enough to endure the pressures involved. He said that his health had been poor for the past two years. Respiratory problems had been the major complaint, and he had required extensive hospitalization,

which created additional financial problems. Because of these health problems, he had been unable to work and it was necessary for him to rely on his wife's income to provide the family's only source of support.

Phil reported his deafness as a congenital condition, and had no hearing in either ear. He complained of no other disabilities, with the exception of breathing difficulties. His primary mode of communication was ASL and limited note writing. Because of the communication handicap, he relied on interpreter services when dealing with hearing professionals.

He was born and raised in Arkansas and attended the Arkansas State School for the Deaf. He completed the 11th grade, and his education revolved around printing and carpentry. He indicated that he had no speech training and admitted his English skills were not very good. He received further training in a vocational-technical school and completed a two year training program in printing. He obtained a certificate of completion and immediately was employed as an apprentice in the printing field. He had held four jobs relating to the printing area, the last being with a large printing company for six years. He was forced to leave because of health-related problems. His current plans were to begin another training program, as his health had improved and he was ready to work again. His plans were to pursue training and employment in the carpentry trade.

Phil gave limited information on recreation and leisure activities. He and his family attended church twice monthly and were members of the local Methodist church. He reported no other memberships in clubs or organizations. He enjoyed bowling with his wife and deaf

friends. Other leisure activities included attending parties, mixers, and camping. His favorite leisure activity was bowling, and he preferred to do this with his wife and deaf friends. He reported that he bowled on a weekly basis when he had the money and his health was good. He revealed he had very few hearing friends and preferred to associate with deaf persons. Phil indicated he would like to do more playing with his kids and do more camping. He expressed dissatisfaction with his current involvement in recreational activities and indicated financial difficulties and health problems as the major deterrents to a quality leisure lifestyle.

Process. Phil answered 67 questions pertaining to personal, educational, vocational, recreational, and disability related information. He was asked a series of 17 questions relating to personal data, including address, social security number, telephone number, birthdate, marital status, family members, and their ages. In addition, he was asked about his health and his relationship with his wife and children. On all of the 17 standardized questions, he either looked straight ahead (visual), or up to the left (visual memory).

The majority of questions (13) on the personal data section required very little thought and resulted in short answers utilizing a visual lead system. The remaining four questions required more thought and considerably more eye shifts. Phil could not remember his social security number as initially he looked up to the left, then up to the right, and finally back up to the left before giving the number and checking it in his wallet. Structurally, he made a visual memory shift, attempting to make a picture of the number, and then he checked it out with a visual construction shift (V^R V^C V^R). Before answering,

he again made another visual memory shift in order to be sure of his correct number.

Additional questions relative to health and family relationships were presented. Phil was asked about his health, and his eye shifts included looking up to the left, down to the left, up to the right, down to the left, straight ahead, and then down to the right. In terms of structure, he looked at an old picture, talked to himself about it, looked back to the same old picture, talked to himself about it again, looked straight ahead, and then had a feeling of some type (V^R A_d V^C A_d V K). Body movement, wrinkled forehead, and frown was indicative of a "bad" feeling, and this was confirmed by content information.

Phil answered additional questions relating to disability, education, employment, and leisure activities. This involved 51 questions, all of which were initiated by visual leads. During 67 questions, the participant either looked straight ahead (visual), or up to the right or left (visual construction or visual memory). In terms of responding to the questions, his primary lead system was classified as visual, but there would be some question as to the most valued representational system. However, it can safely be assumed that it was not in the auditory realm, as the only auditory shifts were to the internal dialogue area.

The mapping of "successful" strategies of peak performance behaviors on both occasions revealed that the lead was initiated by visual memory shifts. All sensory channels were noted in each of the two reported success strategies. There was no significant pattern of eye shifts, but there was a high utilization of the visual channel.

The "stuck" strategies of problem behavior were initiated by visual memory and internal dialogue shifts. There was considerable visualization in both strategies; however, there was an absence of visual construction shifts. When compared to the eye scanning patterns of the successful strategies, the eye scanning patterns of "stuck" strategies had a higher involvement of auditory shifts, all of which were to the internal dialogue area. Again, there was no significant pattern of eye shifts noted. However, of major significance was the lack of visual construction shifts during "stuck" strategies of problem behaviors.

Participant #2

Content. Margaret was a 48 year old, black, divorced, female with one son, aged 15 and one daughter aged 12. She reported her hearing disability as total deafness of unknown etiology from birth. Her major mode of communication was ASL and limited notewriting. She communicated with her children by use of "homemade" signs and notewriting. She indicated her children were being raised by their grandmother. However, Margaret reported a good relationship with her children, regardless of the communication handicap.

Margaret was born and grew up in Louisiana. She attended the Louisiana School for the Deaf and completed the 10th grade. She entered a vocational-technical program, but was unsuccessful, due to the absence of support services such as tutoring and interpreting services. She indicated that she received neither special training in speech nor language development while in educational programs. She did not plan to pursue any future training because of her "age."

Margaret had been unemployed for two months. Her source of income was unemployment insurance benefits. She revealed a successful work history, as she had worked competitively at two different positions over extended periods of time. She had worked at a local sewing factory for 16 years as a seamstress and at a hospital as a housekeeper for 10 years. She was fired from her last job due to a "bad attitude." Further investigation revealed that the participant had not been given equitable raises nor promotions because of her deafness. Margaret expressed concern and frustration regarding her present unemployment.

Margaret had been a member of only one formal organization. She had been a member of a local Baptist church for 24 years and attended on a weekly basis. Interpreter services were not provided at her church. Margaret indicated her favorite leisure activity was watching television, especially sports events. However, she listed various activities, including fishing, shopping, attending church, and sewing. She reported her leisure experiences were limited because of her need to work and earn money. Regarding future recreational and leisure needs, Margaret expressed an interest in becoming involved in an exercise program (jogging, swimming, Weight-Watchers) in order to lose weight and generally feel better. She offered lack of money and lack of information as the major reasons for not participating in such programs.

Process. The participant was asked a series of questions regarding personal, disability, educational, vocational, and recreational data. Her eye scanning patterns were mapped and recorded on 60 questions. She was asked 12 questions relating to personal data. On all of the 12 questions, she looked straight ahead (visual) or up to

the left (visual memory). Six of the questions were initiated with a visual memory lead. Of major importance relative to the personal data section, the participant provided content information regarding relationships noted to be up to the left, down to the left, down to the right, up to the right, and up to the left. Structurally, the participant experienced an eidetic picture, talked to herself about it, had some type of feeling, constructed a visual image, and concluded by looking back at the old picture (V^R A_d K V^C V^R).

Margaret was asked 48 questions regarding educational, vocational disability, and leisure activities. All questions were initiated by visual leads. Of 60 questions, the participant either looked straight ahead (visual) or up to the right or left (visual construction or visual memory). Therefore, her primary lead system would be considered visual. Her most valued representational system cannot be identified because of a lack of data; however, it would either be visual or kinesthetic. The auditory realm can be ruled out since she did not access either auditory memory or construction. The only auditory access was that of internal dialogue.

The mapping of successful strategies of peak performance behaviors on both strategies were initiated by visual leads. There was considerable visual accessing, especially visual memory leads. All sensory channels were noted in each of the two reported success strategies. There did not appear to be any significant pattern of eye shifts between the two strategies, but there was a high concentration of visual access leads.

The mapping of "stuck" strategies of problem behavior on both occasions were initiated by visual leads. There was a significant

pattern established with the accessing cues which were present in both strategies. Structurally, the "stuck" strategy was initiated with a visual lead. The participant talked to herself about it; had a feeling of some type; talked to herself again about it; and then looked back at the remembered image ($V\ A_d\ K\ A_d\ V^R$). In addition, both of the "stuck" strategies were without visual construction eye shifts. In comparing eye scanning patterns, the eye scanning patterns of "stuck" strategies appeared to have higher involvement in auditory shifts. It was noted that all shifts to the auditory realm were to the internal dialogue area.

Participant #3

Content. Robert was a 28 year old, never-married, black male, claiming no dependents. He was born and raised in Tulsa and lived with his brother and sister-in-law and their three children, ages 12, 10, and 9. He indicated he had lived with his family all of his life and had never lived on his own. He worked and paid for his own maintenance and transportation. Robert revealed he was close to his family members, even though there was a definite communication barrier. He said that very few of the family members could sign with him, and that most of his communication was limited to notewriting. He did express some frustration because of the isolation imposed by his deafness. He indicated that he was in good health and enjoyed staying that way. He exercised daily and participated in many recreational and leisure activities.

Robert reported his deafness was congenital in nature and had no idea as to the etiology. He reported he was unable to hear in either ear, and his primary mode of communication was ASL. In addition, he

utilized notewriting and finger spelling. He did have some speech training, but he said that he was unable to lipread or utilize his voice. He indicated the primary disabling condition of deafness was the isolation and separation from other people. He did admit that he enjoyed the challenge of trying to communicate with hearing people. He believed this was the reason for his "friendly" and "likeable" personality.

Robert grew up in Tulsa, Oklahoma, and graduated from the Oklahoma School for the Deaf in Sulphur. He indicated that he had carpentry and printing training while attending high school. He reported five years of speech training while in elementary school. He was unable to develop his voice or lipread effectively. He indicated the only type of specialized training other than the type he received in high school was on-the-job training in carpentry. Apparently, he was satisfied with his educational achievements and was not interested in pursuing further training in any area.

Robert had been employed full-time as a cabinetmaker, and had worked at the same job for the past six years. He began this job as an on-the-job training employee. He expressed an extreme satisfaction with his present employment situation. He enjoyed the type of work as well as the people with whom he was associated. He indicated that it had been a learning situation for the last six years. He did not feel that he was isolated, because several of the employees had taken an interest in learning sign language, and he had done quite well in eliminating the communication barrier. He indicated that this made him feel much closer to the other employees, thus creating a positive work environment.

Robert reported that he worked at three other positions, including printing, assembly, and maintenance work. He had worked a total of nine years since leaving high school. He indicated that this made him feel good because he had never drawn any type of social security benefits and had always been responsible for himself since he became 18. He said that he was extremely satisfied with his vocational experiences as well as his present job. The only problems that he had related to personal matters, and were caused by certain deadlines and monetary matters. However, he enjoyed his work and had no complaints.

Robert reported a very active social life. He was a member of three different organizations, all deaf related. He attended all of the regular meetings and was an officer in one of the clubs. He indicated that he had been attending meetings over the past five years. He stated that he had a very satisfying social life, and was involved in playing football, basketball, softball, jogging, attending parties, watching television, and fishing. He reported his favorite leisure activities were playing sports and attending parties. He indicated that he enjoyed attending parties because this gave him a chance to communicate with his deaf and hearing friends. Robert revealed he had many friends, deaf and hearing alike. He enjoyed playing with family, friends, and co-workers as well. Robert appeared to be well adjusted socially, as he indicated that the only real need regarding recreational and leisure activities would be more time to do more playing. Also, he added that his involvement in leisure and recreational activities were largely dependent upon adequate financial resources.

Process. Robert answered 85 questions pertaining to personal, educational, recreational, and disability related data. He was asked a series of 23 questions regarding personal data. On all 23 questions, he either looked straight ahead (visual) or up to the left and right (visual memory and visual construction). The majority of these questions required very little thought, and resulted in short answers utilizing a visual lead system (eyes straight ahead). However, all of the 23 questions were initiated with a visual lead.

Robert was asked about his relationship with his family and his eye shifts included looking up to the left, eyes to the left, eyes to the right, down to the right, straight ahead, and down to the right (V^R A^R A^C K V K). Structurally, he visualized an eidetic image, accessed an old auditory tape, shifted to a new auditory tape, had a certain feeling, looked back at the picture, and then had another feeling. Of significance in this pattern was that the participant accessed all the major sensory channels and specifically accessed both the auditory memory and construction shifts. In addition, he readily accessed the kinesthetic shift. It should be pointed out that Robert had quite an ability to express himself through mime and gesture. He also was extremely verbal as he vocalized different types of sounds and noises.

Robert answered additional questions relating to disability education, employment, and leisure activities. This involved 62 questions. All but four of these questions were initiated by visual leads either looking straight ahead (visual), or up to the left or right (visual memory or visual construction). His primary lead system would be considered visual, and his primary representational system would either be visual or kinesthetic. However, there was considerable

auditory accessing both to the right and to the left. Additional data was needed to accurately determine the primary representational system.

The mapping of successful strategies of peak performance behaviors on both occasions were initiated by visual shifts. Auditory shifts were frequent, including internal dialogue and auditory memory shifts. In addition, visual construction (V^C) and kinesthetic (K) shifts were prevalent. There appeared to be a similar pattern throughout both successful strategies. The participant initiated one strategy with a visual memory shift, shifted to an auditory access, accessed the visual cue, and shifted back to an auditory channel (V^R A^R V^R A_d K V^C). It should be noted that all sensory channels were noted in both successful strategies.

The mapping of stuck strategies of problem behavior were initiated by visual (eyes straight ahead) and auditory memory shifts. There was a definite pattern established which was consistent throughout both stuck strategies. Structurally, in both stuck strategies, the participant accessed an auditory memory, shifted to an auditory construction, back to auditory memory, and back to auditory construction (A^R A^C A^R A^C). It should also be noted that there was very little visualization noted in the stuck strategies, either eidetic or constructed.

Participant #4

Content. Betty was a 41 year old, white, married female with four children, two sons age 15 and age 13 and two daughters age 10 and age 6. She had been married to the same man for 24 years. Her husband was deaf, and she described her married to him as happy and satisfying. She had a good relationship with her children and communicated

quite well with them. Her youngest daughter was hearing impaired and the other three children had normal hearing. She indicated her husband had difficulty relating to the oldest son; therefore, the family became involved in a family therapy situation. An interpreter was included during the family therapy sessions. The participant reported that the results of the therapy were positive and had enhanced better communication among all family members.

Betty was born deaf of unknown etilogy. In addition to her hearing impairment, she was legally blind in the right eye and had rheumatoid arthritis. She utilized a hearing aid to assist with localization, lipreading, and other environmental cues. Her primary mode of communication was ASL and limited speech. Her voice quality was typical of "deaf speech" and her verbal skills were adequate to converse, utilizing both sign language and voice simultaneously. She communicated much better in a one-to-one situation, as she had difficulty following the flow of conversation in groups.

Betty was born and grew up in Kansas. She graduated from the Kansas School for the Deaf in Olathe. Her major course of study in high school focused on home economics courses, including cooking and sewing. Speech training was provided from the first through the tenth grade. After graduating she took two lipreading classes to improve her overall communication process. In addition, she attended a local vocational-technical facility and received a certificate of completion in a secretarial skills program.

Upon completion of the secretarial skills program, Betty was hired as a file clerk for an investment firm. She worked there for two years until problems surfaced which were related to her visual

problems as well as other physical concerns. She had to resign because of her physical inability to perform the job's responsibilities. She was seeking employment as a clerk typist with an emphasis on copy typing. Throughout the past Betty had worked at many different types of jobs, but her most successful vocational experiences included six years as a laundry worker, four years as a dishwasher, and two and one-half years in the assembly area. She had been competitively involved in employment situations while successfully fulfilling her homemaking responsibilities. The only difficulties regarding employment endeavors involved problems due to physical limitations imposed by the combination of her disabilities.

Betty reported membership in recreational/leisure-related organizations. Two of these organizations are specifically designed for deaf and hearing impaired individuals. She preferred participating in activities that included all family members. She had many hearing and deaf friends and enjoyed communicating in general. He favorite leisure activities included attending mixers, shopping, visiting with friends, bowling, sewing, cooking, reading, and watching television. Her most valued activities included "playing with the kids" and attending parties. She indicated that more structured recreational activities for deaf teenagers and young adults were needed in order to develop positive self-images and healthy interpersonal relationships. She also suggested the need for leisure activities designed to facilitate communication between hearing impaired and nonhearing impaired family members. Betty reported her leisure and recreational involvement as satisfactory and indicated that money was a minor limiting factor regarding additional leisure activities.

Process. The participant answered 94 questions regarding personal, educational, vocational, recreational, and disability-related information. Sixty-one of the questions were initiated with visual shift leads, and 33 of the questions were initiated with auditory shift leads. Even though visual and auditory shifts were numerous throughout the interview period, there appeared to be a lack of kinesthetic (eye down to the right) and auditory internal dialogue (eyes down to the left) eye shifts. In addition, Betty was quite verbal and chose to answer all questions utilizing a total communication approach.

The participant provided information about recreational and leisure activities. She became more expressive and laughed throughout this portion of the interview. She provided considerable content and process data. For instance, to process information on the needs question, the participant responded with visual memory, visual construction, auditory construction, kinesthetic, auditory construction, and visual memory (V^R V^C A^C K A^C V^R) eye shifts. During this question, Betty slowed her signing speed, frowned, leaned forward on the edge of her chair, pointed and shook her finger, answered, sat back on the chair, raised her head, and smiled.

The mapping of successful strategies revealed all sensory channels were utilized and noted. The two strategies were initiated with different accessing cues: first was with a visual memory (V^R) shift, and the second was with an auditory construction (A^C) shift. There did not appear to be any significant pattern of accessing cues between the two strategies. However, the participant responded with a shift from auditory construction (A^C) to auditory memory (A^R) on both strategies. It was noted that the next shift was to a visual mode, and

even though they were different shifts, the end resulted in a kinesthetic cue (A^C A^R V^R K). It was noted that both successful strategies lacked auditory internal dialogue cues.

The mapping of stuck strategies of problem behavior was initiated by different accessing cues. One was initiated with a visual memory shift (V^R), and the other was initiated with an auditory memory (A^R) cue. Auditory internal dialogue (A_d) shifts were prevalent in both strategies elicited. There did not appear to be any significant pattern between the accessing cues of both strategies. In addition, auditory construction cues were not present in either of the strategies. When compared to the eye scanning patterns of the successful strategies, Betty had a higher involvement of the auditory internal dialogue cues, and they were void of auditory construction shifts.

In terms of responding to the questions, the participant's primary lead system was either visual or auditory. Because she initiated the majority of her responses with visual accessing cues, her lead system would be considered visual. Her primary representational system would be considered as auditory or visual, but there was inadequate data to make a definite decision in this matter. Both auditory internal dialogue and kinesthetic accessing cues were noted throughout the interview. However, there was a general lack of eye shifts to these two areas.

Participant #5

Content. Phillip was a 23 year old, white, never-married male without dependents. He lived alone and had done so for one year. His primary means of support was Social Security benefits. He had been drawing these benefits for four years. His family lived in south

Texas, and Phillip had little contact with them. He had difficulty providing information about his family as he had not had contact with them for three years. He was unsure as to their ages and addresses.

Phillip was born and raised in Arkansas. He attended the Arkansas School for the Deaf in Little Rock from the first grade through his sophomore year. He stayed with his parents during the summers while attending the residential school. Phillip reported that he did not communicate well with his family. He communicated with his family by writing notes. Because his English skills were not developed, he had difficulty understanding even simply written messages. His primary mode of communication was ASL, with limited notewriting. He indicated that he received one and a half years of speech training and did not enjoy the training, nor was he able to develop his speech.

While in high school, Phillip was presented with different vocational interest areas. He learned about carpentry, plumbing, welding, and mechanics. He had difficulty in school regarding discipline problems and was suspended. He eventually dropped out of high school, but later received vocational-technical training in plumbing. He experienced the same problems in the vocational-technical programs as he did in high school. However, special services were provided and assisted the participant in the successful completion of the six month certificate program.

Phillip had not been able to successfully secure and maintain competitive enjoyment. He had worked at two jobs, and he was fired from both positions. He indicated that he was fired because of attitudinal problems relating to misunderstandings surrounding communication

difficulties. His entire work experience totaled one month. His goals were to become employed, get married, and raise a family.

Phillip reported limited involvement in leisure and recreational activities. He was not involved in any clubs or organizations. However, he did attend church occasionally. He listed watching television, dating, and fishing as his favorite leisure activities. He indicated that dating was his overall favorite activity, but that it had been two months since his last date. Phillip also revealed that he had not been fishing in two years. He reported his leisure time for the most part was spent alone. He indicated that he consistently had trouble establishing and/or maintaining relationships. He expressed his leisure needs as primarily wanting more friends.

Process. Phillip's eye scanning patterns were noted on 62 questions relating to personal, disability, educational, vocational, and recreational data. On 42 of the questions, he initiated his answers with visual leads. Thirty-three of these were visual memory (V^R), and eight were auditory internal dialogue (A_d) leads. In terms of responding to the questions, the primary lead system was visual. However, it was noted that there was also utilization of kinesthetic (K) and auditory internal dialogue (A_d) channels. Throughout the interview, the participant avoided the auditory realm, both memory and construction (A^C or A^R). The only auditory shifts were those to the internal dialogue (A_d) area.

The mapping of "successful" strategies of peak performance behavior on both occasions were initiated by visual memory (V^R) leads. It was also noted that there was a significant pattern of eye shifts between the two "successful" strategies, both containing visual memory,

visual construction, and kinesthetic shifts (V^R V^C K). An auditory internal dialogue (A_d) cue was present in one of the strategies. However, auditory, either constructive or remembered shifts, were not noted in either strategy.

The mapping of "stuck" or unsuccessful strategies of problem behavior revealed visual memory (V^R) and auditory internal dialogue (A_d) leads. There was no significant pattern of eye shifts observed throughout the strategies. However, it was noted that the participant utilized visual memory, auditory internal dialogue, and kinesthetic shifts (V^R A_d K). When compared to the eye scanning patterns of the successful strategies, the eye scanning patterns of the "stuck" strategies had a higher concentration of auditory internal dialogue shifts (A_d). In addition, visual construction (V^C) shifts were not observed in the "stuck" strategies.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

For the purpose of gathering data regarding recreational and leisure information of prelingually deaf adults, a case study methodology was instituted and five individuals were interviewed. Of major importance in this regard was the individual's educational, social, personal, vocational, and recreational experiences. NLP, the interviewing methodology utilized in this study, was communication-based and focused on verbal and nonverbal forms of communication. NLP provided the structure for gathering information. A case study methodology and use of the NLP model as an interviewing technique/tool proved to be effective in gathering data with prelingually deaf adults. Because communication was the major problem faced by the deaf individual, an interviewing model which focused on both verbal and nonverbal forms of communication was appropriate in this regard.

The recreational activities of the five individuals interviewed varied from individual to individual. However, the data revealed that the recreational activities and leisure needs of prelingually deaf adults do not differ significantly from the activities and needs of the nonhearing-impaired population. However, because of the communication barrier, these individuals were generally unable to take

advantage of the leisure programs available to the public. Therefore, their involvement in the leisure programming and recreational activities was almost exclusively designed by and for deaf individuals. This allowed for participation, involvement, and development of the individual's educational and social skills. Although this systematic approach ensured valuable information and experience to deaf individuals, it isolated the deaf community from the mainstream of society.

Findings of the Study

Five prelingually deaf adults were interviewed regarding personal, educational, vocational, disability, and recreational experiences. Their responses were divided into content and process sections for ease of presentation and analysis of the data. NLP was the communication model utilized to interview participants. Its structure, terminology, and sound theoretical principles resulted in gathering valuable process information relative to "successful" and "unsuccessful" behaviors. Particular eye scanning patterns of subjective internal experiences regarding successful and unsuccessful behavior were calibrated, mapped, and recorded.

A review of the content information revealed five prelingually deaf adults, three men and two women, with an average age of 37 years, who participated in this study. Two of the individuals were married, one was divorced, and the other two had never been married. Educational information revealed all participants had attended residential schools for the deaf in various states. Three of the participants had speech training while in elementary school. Only one of these three were able to develop a useful voice. Two of the participants had no

exposure to speech therapy. All five participants reported ASL as their primary communication mode. Two of the participants graduated from high school. None of the individuals pursued college; however, three of them, including one of the high school graduates, completed a certification program in a vocational-technical school. Four of the individuals were unemployed, but only one reported not having a positive work experience.

Recreational and leisure information revealed all five individuals attended religious functions as a recreational activity. Four individuals were members of various churches and attended on a regular basis. Two of the participants reported membership and involvement in at least two clubs and organizations sponsored by and for deaf individuals. One participant reported no membership in any club or organization. Favorite leisure activities included fishing, watching television, attending parties, participating in sports activities, and playing with their children. Specific needs included requiring more time, money, and resources for leisure programming of recreational activities. One participant suggested a need for more activities specifically designed and organized by and for deaf individuals, such as bowling, softball, and basketball tournaments. Two participants expressed satisfaction and three expressed dissatisfaction with their leisure lifestyle and involvement in recreational activities. All five participants provided information regarding specific leisure needs.

A review of process data revealed all participants utilized a visual lead system. Primary representational systems were not established on each of the participants because of a lack of data. Two of

the participants utilized all sensory modes, while three of the participants primarily utilized the visual, kinesthetic, and auditory internal dialogue channels. There was a general lack of accessing of auditory memory and auditory construction cues.

Each participant provided two "successful" strategies of peak performance behavior. Eye scanning patterns on all but one of the ten strategies elicited was initiated with visual cues. The remaining strategy was initiated with an auditory construction lead.

Ten unsuccessful strategies of problem behavior were elicited from the participants. Six of the strategies were initiated with visual leads, two with auditory internal dialogue/shifts, and two with auditory memory shifts. Individual eye scanning patterns provided in-depth analysis of the participant's unique expression of subjective experience regarding successful and unsuccessful behavior.

Conclusions

The following conclusions were made based on the analysis of the data collected:

1. The prelingually deaf adults who participated in this study were involved in a variety of recreational activities not differing significantly from the leisure activities of the nonsensory impaired population.

2. The prelingually deaf adults interviewed expressed an understanding of their leisure needs and offered specific leisure activities in order to meet these needs.

3. Recreational activities and leisure programming for the prelingually deaf participants proved to have an immediate effect on their current situation.

4. The use of NLP an an interviewing technique assisted in gathering, organizing, and presenting the data.

5. The theoretical framework of NLP provided consistent analysis of the data.

6. NLP structure and terminology was successfully utilized in mapping and recording prelingually deaf individuals' eye scanning patterns of internal subjective experience relating to successful strategies of peak performance behavior and unsuccessful strategies of problem behavior.

7. NLP structure and terminology was successfully utilized in mapping and recording prelingually deaf individuals' eye scanning patterns and in determining the participants' primary lead systems.

Recommendations

Analysis of the interviews reinforced the following recommendations:

1. Prelingually deaf adults have diverse leisure needs, and appropriate leisure programming with an emphasis on accessibility would enable sensory impaired individuals to take advantage of programs designed for the nonsensory impaired population.

2. Resource centers for the deaf and hearing impaired population are encouraged, in order to continue leisure programming efforts focusing on specific leisure needs of prelingually deaf individuals.

3. Prelingually deaf adults should be involved in planning, organization, and implementation of leisure programs designed to meet their specific needs.

4. Prelingually deaf adults are encouraged to participate in recreational activities available to all individuals.

5. Development of leisure programs designed to bridge the communication gap between deaf and hearing individuals are recommended.

6. Prelingually deaf adults should be encouraged to support and participate in recreational activities designed by and for deaf persons.

Recommendations for Additional Research

The following recommendations for additional research are based upon analysis of the data and this researcher's experiences:

1. Further research of NLP as an interviewing technique is indicated.

2. Additional research of particular eye scanning patterns of successful and unsuccessful behavior is suggested. It is recommended that eye scanning patterns be videotaped for ease of gathering, storing, and analyzing data.

3. The mapping and analysis of eye scanning patterns/accessing cues related to particular behavior should be further investigated as to the effect it could have on the individual's unique learning strategy.

4. Further research and development of an effective leisure assessment tool specifically designed for prelingually deaf individuals is recommended.

Concluding Statement

Prelingually deaf individuals have diverse leisure interests and participate in a variety of recreational activities. Specific leisure

needs of this group vary according to the individual's interests, abilities, and disabilities. Traditionally, sensory-impaired persons have not participated in leisure programs designed to meet the recreational needs of the able-bodied population in general. Recreational programs specifically designed for the prelingually deaf population are few in number and are generally located in urban areas. Deaf persons appear to take advantage of these leisure programs and actively participate in the various activities. Specific program development allows for full participation by the individual; nonetheless, it enforces segregation and further isolates the deaf consumer from the mainstream of leisure programming and recreational activities.

Accessibility of sensory-impaired persons into established leisure programs is, of course, the ideal situation. However, this is not an easy undertaking, but the literature does reveal that a more individualized and sensible approach to leisure programming is happening. Formal educational programs have inherited the responsibility for preparing training programs and professionals to effectively meet the challenge of bridging the "leisure gap" experienced by sensory-impaired individuals. Accessibility and appropriate leisure programming experiences will allow for full participation, enabling and enhancing the individual's physical, social, emotional, educational, and vocational growth.

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APPENDIX

PERSONAL DATA

Participant #: 1 Social Security #: V^R V^C V^R

Address: V Phone #: V Age: V

Birthdate: V Race:

Marital Status: V

Family Members:

name	age	relationship
V	V	
V	V	
V	V	
V	V	

Notes on personal data:
HEALTH: V^R Ad V^R Ad V K

FAMILY RELATIONSHIPS: V Ad V^C V^R K V

EDUCATIONAL DATA

Elementary:

name	location	activities	dates
V	V		V^C V^R

Secondary:

V	V	V^R	V^R V^C

Post-Secondary

V^R	V	V	V^R Ad V^R

Other education and/or training experiences:
Speech: V

FUTURE TRAINING: V^C V^R V^C

VOCATIONAL DATA

Current Employment:

name	location	dates	job duties
V			

Previous Employment:

V^R	V	$V^C V^R$	- V
V	V	V^R	V

Notes on employment and additional questions:

Source of Support: $V^R V^C Ad$ K V

Limitations to employment: V

Reason left job: $V^R V^C$

Problems on jobs: $V^R Ad V^R K V$

LEISURE/RECREATIONAL DATA

Organizations and Memberships:

name	dates	duties/responsibilities
$V^R Ad V^R V^C$	V	$V^R V^C$

Favorite Leisure Activities (sports, etc.):

name	most recent involvement	with whom
$V^R V^C V^R Ad V^R$	$V^R Ad V^R$	V V^R
V^R Ad	$V^R V^C$	V
V^R	V^R K	V
$V^C V^R$	V^R Ad	V^R

Notes on leisure activities and additional questions:

Favorite Activity: $V^R V^C V^R Ad$

Friends: V K Ad

Leisure Needs: $V^R Ad V^R V^C$

DISABILITY RELATED DATA

Primary Disability: V
Secondary Disability: V
Other Disabilities:
Etiology of Deafness: V^R
Age of Onset: V dB (decibel) Loss: V^R
Mode of Communication: V

Notes on disability and additional questions:

HANDICAPPING CONDITIONS: V^R K Ad K V

MAPPING STRATEGIES VIA ACCESSING CUES/EYE SCANNING PATTERNS

Successful Strategy (peak performance behavior):

1. V^R V^C K V^R Ad V^R

2. V^R K V^R Ad V^R K V^C

Stuck Strategy (problem behavior):

1. V^R Ad V Ad K Ad K V

2. Ad V^R Ad K V

PERSONAL DATA

Participant #: 2 Social Security #: V^R

Address: V Phone #: V^R Age: V

Birthdate: V^R Race:

Marital Status: V V^R Ad K

Family Members:

name	age	relationship
V	V^R	
V	V	

Notes on personal data:

HEALTH: V^R Ad V

FAMILY RELATIONSHIPS: V^R Ad K V^C V^R

EDUCATIONAL DATA

Elementary:

name	location	activities	dates
V	V		V

Secondary:

V	V	V	V^R Ad

Post-Secondary

V			

Other education and/or training experiences:

SPEECH: V

FUTURE TRAINING: V^R V^C V^R Ad V

VOCATIONAL DATA

Current Employment:

name	location	dates	job duties
V			

Previous Employment:

V	V^R	V^R	V^R
V	V	V^R	V^R

Notes on employment and additional questions:

Source of Support: V^R Ad V

Limitations to Employment: V^R V^C K Ad V^R

Reason left last job: V^R Ad V V^R Ad K

Problems on jobs: V^R Ad K V^R Ad

LEISURE/RECREATIONAL DATA

Organizations and Memberships:

name	dates	duties/responsibilities
V^R	V^R	V^C V^R

Favorite Leisure Activities (sports, etc.):

name	most recent involvement	with whom
V^R V^C	V	V
V^R Ad K	V^R Ad	V^R
V^R V	V^R	V
V^R Ad	V	V

Notes on leisure activities and additional questions:

Favorite Activity: V^R Ad V K

Friends: V^R Ad V^R

Leisure Needs: V^R V^C V^R V^C

DISABILITY RELATED DATA

Primary Disability: V^R
Secondary Disability: V^R
Other Disabilities:
Etiology of Deafness: V^C
Age of Onset: V dB (decibel) Loss: V^R Ad
Mode of Communication: V^R V^C V^R

Notes on disability and additional questions:

Handicapping Conditions: V^R V^C V

MAPPING STRATEGIES VIA ACCESSING CUES/EYE SCANNING PATTERNS

Successful Strategy (peak performance behavior):

1. V V^R V^C V^R Ad K V

2. V^R V^C Ad K V^R V

Stuck Strategy (problem behavior):

1. V Ad K Ad V^R

2. V^R Ad K Ad V^R V

PERSONAL DATA

Participant #: 3 Social Security #: V^C

Address: V Phone #: V^R Age: V

Birthdate: V Race:

Marital Status: V

Family Members:

name	age	relationship
V	V^C	V
V	V^R	V
V	V^C	V
V	V^C	V
V	V^C	V

Notes on personal data:

HEALTH: V A^R K V^C

FAMILY RELATIONSHIPS: V^R A^R A^C K V K

EDUCATIONAL DATA

Elementary:

name	location	activities	dates
V	V		

Secondary:

V	V	V^R V^C	V^C

Post-Secondary

Other education and/or training experiences:

SPEECH: V^R A^R A^C K

FUTURE TRAINING: V^C V^R A^R A^C

VOCATIONAL DATA

Current Employment:

name	location	dates	job duties
V	V	V^C	V

Previous Employment:

$V^R V^C$	V	V^R	$V^R A^R$
$V^R A^R$	V^R	V^C	$V^R A^R$
$V^R A^R$	V^R	V^C	$V^R A^C$

Notes on employment and additional questions:

Source of Support: $V^R A^R$

Limitations to employment: A^R V^R V^C

Reason for leaving last job: A^R V^R Ad K

Problems on job: A^R A^C K V^R V^C K

LEISURE/RECREATIONAL DATA

Organizations and Memberships:

name	dates	duties/responsibilities
V	$V^R A^R$	V A^R
V^R	$V^R A^R$	V A^C
V^R	$V^R A^C$	V R A^R

Favorite Leisure Activities (sports, etc.):

name	most recent involvement	with whom
$V^R V^C$	$V^C V^R$	V^R
V^R	V^C	V^R
$V^R A^R$	V	V
V^R Ad A^R	V	V
V A^R	V^C	V^C

Notes on leisure activities and additional questions:

Favorite activity: V A^R V^R K

Friends: V V^R A^R A^C V^C

Leisure needs: V^R V^C K Ad A^R K

DISABILITY RELATED DATA

Primary Disability: V
Secondary Disability: V
Other Disabilities:
Etiology of Deafness: V
Age of Onset: V^R dB (decibel) Loss: V^C
Mode of Communication: V^R A^R A^C V^C

Notes on disability and additional questions:

HANDICAPPING CONDITIONS: V^R

MAPPING STRATEGIES VIA ACCESSING CUES/EYE SCANNING PATTERNS

Successful Strategy (peak performance behavior):

1. V^R A_d V A^R V^R K V

2. V^R A^R V^R A_d K V^C

Stuck Strategy (problem behavior):

1. V A^R A^C A^R A^C K

2. A^R A^C A^R A^C

PERSONAL DATA

Participant #: 4 Social Security #: V A^R

Address: V^R Phone #: _____ Age: V

Birthdate: V Race: _____

Marital Status: A^R A^C

Family Members:

name	age	relationship
V	V	V
A^R	A^R	V
A^R	A^R	V
A^R	V	V
V	A^R	V

Notes on personal data:

HEALTH: A^R V^R V^C A^C Ad K

FAMILY RELATIONSHIPS: V^R Ad A^R V^A Ad K

EDUCATIONAL DATA

Elementary:

name	location	activities	dates
V	V		

Secondary:

V	V		$V^R A^R$

Post-Secondary

$V^R A^R$	V	A^R	V^R V^C
A^R V^R	V	A^R	V^R A^R

Other education and/or training experiences:

SPEECH: A^R Ad A^R A^C

FUTURE TRAINING: V^R K V^C K

VOCATIONAL DATA

Current Employment:

name	location	dates	job duties
A^R			

Previous Employment:

$A^R A^C$	V	$A^C V^C$	$V^R V^C$
$A^R A^C$	V	A^C	$V^R V^C$
$A^R V^R$	V	V^C	$V^R V^C$
$A^R A^C$	V	V^C	V^R

Notes on employment and additional questions:

Source of Support: V

Limitations to Employment: A^R Ad $V^R V^C$

Reason left last job: V^R K $A^R A^C$

Problems on JOBS: V^R K A^R K

LEISURE/RECREATIONAL DATA

Organizations and Memberships:

name	dates	duties/responsibilities
V^R Ad	V^R	$A^R A^C$
V	$V^R A^R$	$V^R A^R$
$V^R A^R$	V^R	V^R

Favorite Leisure Activities (sports, etc.):

name	most recent involvement	with whom
$V^R A^R$	V^R	V^R
$V^R A^R$	V^R	V^R
A^R	V^R	A^R
A^R	V^R	A^R
A^R	V^R	A^R

Notes on leisure activities and additional questions:

FAVORITE ACTIVITY: $A^R V^R$

LEISURE NEEDS: $V^C A^C$ K $A^C V^R$

DISABILITY RELATED DATA

Primary Disability: A^R
Secondary Disability: V
Other Disabilities: $A^R K$
Etiology of Deafness: V
Age of Onset: V dB (decibel) Loss: $A^R A^C$
Mode of Communication:

Notes on disability and additional questions:

HANDICAPPING CONDITIONS: $A^R A^C V^R V^C$

MAPPING STRATEGIES VIA ACCESSING CUES/EYE SCANNING PATTERNS

Successful Strategy (peak performance behavior):

1. $V^R A^C A^R V^C K$
2. $A^C A^R V^R K$

Stuck Strategy (problem behavior):

1. $V^R A_d K V^C$
2. $A^R A_d V^R A_d K$

PERSONAL DATA

Participant #: 5 Social Security #: V^R Ad

Address: V^R V^C V^R Phone #: _____ Age: V

Birthdate: V^R Race: _____

Marital Status: V

Family Members:

name	age	relationship
V	V^R	
K	Ad V^C	
V^R	K	
V^R	V^C V^R	

Notes on personal data:

HEALTH: V^R Ad K

FAMILY RELATIONSHIPS: Ad V^R K

EDUCATIONAL DATA

Elementary:

name	location	activities	dates
V^R	K		

Secondary:

K	V	Ad V^R K	V^R

Post-Secondary

V^R V^C	K	V^R	K
V^R Ad K	V^R	V^R	V

Other education and/or training experiences:

FUTURE TRAINING: V^R Ad V^R

VOCATIONAL DATA

Current Employment:

name	location	dates	job duties
V			

Previous Employment:

K	V^R	Ad V^R	K V^R V^C
V^R	Ad V^R	V^R Ad	V^R Ad

Notes on employment and additional questions:

Source of Support: K V^R

Limitation to Employment: V^R Ad K

Reason left last Job: Ad V^R V^C K

Problems on jobs: V^R Ad V^R Ad

LEISURE/RECREATIONAL DATA

Organizations and Memberships:

name	dates	duties/responsibilities
V^R Ad K V^C		

Favorite Leisure Activities (sports, etc.):

name	most recent involvement	with whom
K	V^R	V^R Ad
V^R	Ad V^R	V^R K
K	V^R K	Ad V^R

Notes on leisure activities and additional questions:

FAVORITE Activity: V

FRIENDS: K V^R V^C

LEISURE NEEDS: V^R Ad K Ad V^R

DISABILITY RELATED DATA

Primary Disability: V
Secondary Disability:
Other Disabilities:
Etiology of Deafness: V^R
Age of Onset: V^R dB (decibel) Loss: V^R Ad
Mode of Communication: V^R Ad V^R K

Notes on disability and additional questions:

HANDICAPPING CONDITIONS: V^R Ad K V^C

MAPPING STRATEGIES VIA ACCESSING CUES/EYE SCANNING PATTERNS

Successful Strategy (peak performance behavior):

1. V^R V^C K

2. V^R Ad V^R V^C K

Stuck Strategy (problem behavior):

1. V^R Ad V^R K Ad

2. Ad K Ad V^R Ad K

VITA

Gerald Loyd Davis, Jr.

Candidate for the Degree of

Doctor of Education

Thesis: NEURO-LINGUISTIC PROGRAMMING AS AN INTERVIEWING TECHNIQUE WITH PRELINGUALLY DEAF ADULTS

Major Field: Higher Education

Biographical:

Personal Data: Born in Shawnee, Oklahoma, April 26, 1951, the son of Gerald and Venora Davis.

Education: Graduated from Electra High School, Electra, Texas, in 1969; received Bachelor of Arts degree in Political Science from the University of Oklahoma, Norman, Oklahoma, in 1973; received Master of Arts degree in Human Relations from the University of Oklahoma, Norman, Oklahoma in 1975; completed requirements for the Doctor of Education degree at Oklahoma State University in December, 1984.

Professional Experience: Vocational Rehabilitation Counselor for the Deaf, State of Oklahoma, August, 1978-present; Part-Time Sign Language Instructor, Tulsa Junior College, September, 1981-May, 1982; Affective Educational Adviser, Tulsa County Schools, October, 1977-August, 1978; Therapist/Consultant, Seiling Hospital, Seiling, Oklahoma, April, 1976-February, 1977; Assistant Kindergarten Teacher, Middle Earth Day Care Center, Norman, Oklahoma, September, 1976-February, 1977; Adjunct Instructor, Department of Human Relations, University of Oklahoma, September, 1975-May, 1976; Regional Drug Treatment Coordinator/Therapist, Northwest Oklahoma Mental Health Services, Woodward, Oklahoma, April, 1975-September, 1976; Counselor's Aid, Oklahoma Department of Corrections, September, 1973-April, 1974; Counselor, Oklahoma Halfway House, Oklahoma City, June, 1973-November, 1973, Book Clerk, University of Oklahoma, Norman, Oklahoma, August, 1972-June, 1973; YMCA Youth Counselor, Ft. Worth, Texas, June, 1969-August, 1970.