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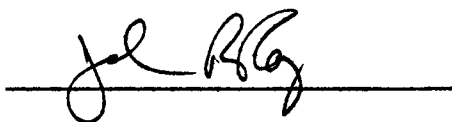
I am submitting herewith a thesis written by Heather Hayes entitled "An Exploratory Study of Perceived Freedom in Leisure among HIV Positive Individuals and Persons with AIDS." I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Human Performance and Sport Studies.


Gene Hayes, Major Professor

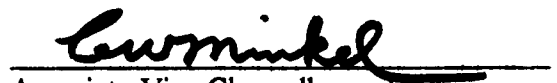
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AN EXPLORATORY STUDY OF PERCEIVED FREEDOM IN LEISURE BETWEEN
HIV POSITIVE INDIVIDUALS AND PERSONS WITH AIDS

A Thesis

Presented for the

Master of Science

Degree

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Heather Hayes

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Dedicated to

Mom, Dad, Paul, Trevor, and Doc

You have all given me the support, love and encouragement I needed to finish this project. Your prayers helped me through the long days and nights. I am forever thankful and I love you all. You are always in my thoughts and prayers.

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research process.

ABSTRACT

The purpose of this study was to explore the perceived freedom in leisure between HIV positive individuals and persons with AIDS.

Sub-problems included:

1. Determining the perceived leisure competence of HIV positive individuals and persons with AIDS.
2. Determining the perceived leisure control of HIV positive individuals and persons with AIDS.
3. Determining the leisure needs of HIV positive individuals and persons with AIDS.
4. Determining the depth of involvement in leisure experiences of HIV positive individuals and persons with AIDS.

Research questions for this study included:

1. What is the difference in perceived leisure competence between HIV positive individuals and persons with AIDS?
2. What is the difference in perceived leisure control between HIV positive individuals and persons with AIDS?
3. What is the difference in the leisure needs between HIV positive individuals and persons with AIDS?
4. What is the difference in the depth of involvement in leisure experiences between HIV positive individuals and persons with AIDS?

For the study, participants consisted of HIV positive individuals and persons with AIDS who were associated with Triangle AIDS Network of Beaumont, Texas and Immunosize of Dallas, Texas. The participants were asked to respond to the twenty-five questions contained on the Leisure Diagnostic Battery Short Form B, which measured perceived freedom in leisure. A total of forty-one questionnaires were returned, however two were unusable due to incomplete answers.

Data were presented according to the four research questions. The conclusion was made that there was no observable difference in the perceived freedom in leisure between HIV positive individuals and persons with AIDS.

Recommendations for future research concerning the recreation and leisure needs of HIV positive individuals and persons with AIDS include an in depth assessment of the recreation and leisure needs of an organization serving this population, a replication of the current study utilizing more than two agencies, and use of a self-designed survey.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	1
Rationale for the Study	4
Purpose Statement	4
Research Questions	5
Delimitations	5
Limitations	6
Assumptions of the Study	6
Definition of Terms	7
Data Collection	10
Summary	10
II. REVIEW OF RELATED LITERATURE	11
Introduction	11
History and Facts of HIV and AIDS	11
Population and Current Statistics	14
Need for Therapeutic Recreation	15
Leisure Diagnostic Battery Short Form B	18
Methodology	19
Summary	20
III. METHODOLOGY	22
Introduction	22
Population	23
Sample	23
Instrumentation	24
Administration of the Instrument	25
Presentation of the Data	26
Summary	27
IV. PRESENTATION OF DATA	28
Participant Profile	29
Research Question One: What is the difference in perceived leisure competence between HIV positive individuals and persons with AIDS?	32
Research Question Two: What is the difference in perceived leisure control between HIV positive individuals and persons with AIDS?	34

Research Question Three: What is the difference in the leisure needs between HIV positive individuals and persons with AIDS?	37
Research Question Four: What is the difference in the depth of involvement in leisure experiences between HIV positive individuals and persons with AIDS?	39
Discussion	42
Summary	43
 V. FINDINGS, CONCLUSIONS AND RECOMMENDATIONS	44
Summary of Study	44
Findings	45
Conclusions	46
Recommendations	46
Summary	47
 BIBLIOGRAPHY	48
 APPENDICES	51
APPENDIX A	52
APPENDIX B	54
APPENDIX C	56
 VITA	59

CHAPTER I

INTRODUCTION

And I looked, and behold a pale horse; and his name that sat on him was Death, and Hell followed with him. And power was given unto them over the fourth part of the earth, to kill with sword, and with hunger, and with death, and with beasts of the earth (The Student Bible, 1986).

AIDS, Acquired Immunodeficiency Syndrome, is a result of the HIV virus, Human Immunodeficiency Virus. HIV destroys the immune system leaving the body unable to fight disease and illness. The virus begins to attack the T-cells, which are the first cells in the body to respond to germs or viruses. T-cells identify the invading virus and then send a message to the B-cells, which are the cells that actually fight the virus or germ. T-cells and B-cells are types of blood cells that are part of the immune system; T-cells being white blood cells (Tennessee Department of Health, 1992). When the B-cells receive the message to fight the invading virus, they create proteins called "antibodies", which attack the type of germ or virus identified by the T-cell. Antibodies are like bullets which will hit only particular targets. Antibodies, however, are not strong enough to kill HIV, giving the virus a permanent dwelling place in the blood.

Most individuals still believe that they will not acquire AIDS. For most people, the disease is known because of famous individuals living with it, family members living with it, friends living with it, and for some, it is known to no one at all (Grossman, 1993). The total number of AIDS cases reported in the United States through June 1996 was

540,806.

People with HIV and AIDS are continuously abused, ridiculed, stigmatized, and maligned. Some people believe that AIDS is divine retribution for immoral lifestyles, while people who have not indulged in risky lifestyles continue to be labeled as innocent victims, implying that the disease is somehow both a condemning epidemic yet an epidemic with many "mistaken" casualties (Tuggle, 1995). Viruses do not work in such a manner. Viruses do not choose their own hosts.

The fore mentioned displays of fear and panic by the non-infected public must not be incorporated by therapeutic recreation professionals. As with any health care system, therapeutic recreation is one which must reach out to those who are socially stigmatized and offer services that have positive impacts on the lives of these individuals. "The key is to tailor...programming to the specific needs of the participants" (Buettner & Kennison, 1993). Therapeutic recreation, in regards to persons with AIDS and HIV positive individuals, can be used as a means through which these individuals can become better accepted in our society. Providing a way for this population to become involved in community recreation opportunities and aiding them in the process of gaining a more positive view of their lives is a benefit of therapeutic recreation. The members of the HIV and AIDS population provide therapeutic recreation professionals a new and challenging avenue to direct their energies and services.

"The purpose of therapeutic recreation is to facilitate the development, maintenance, and expression of an appropriate leisure lifestyle for individuals with physical, mental, emotional or social limitations" (National Therapeutic Recreation Society

[NTRS], 1982). This purpose is established through professional programs and services which aid the client in developing leisure skills and optimizing their leisure involvement. Therapeutic recreation specialists use these principles to enhance client's leisure ability in recognition of the importance and value of leisure in the human experience.

Therapeutic recreation in terms of working with persons with AIDS is a fairly new area of research and trial programs. According to Colvin Idol (personal communication, April, 1995) of AIDS Response Knoxville, this idea, "seems so obvious because you want to improve the quality of life and wellness care of the individuals." There are a few programs in existence in New York and California, but the lack of programs nationwide is surmountable. An individual infected with AIDS mentions that self-help and support groups tend to be very depressing. This is not the type of therapy that seems to work for many patients with AIDS. AIDS brings with it not only physical, but many psychological symptoms which seems to be one area in which therapeutic recreation could be a large benefit. What is not seemingly understood, however, is while other therapies and treatments may not cure the disease such as drug therapy has the possibility to accomplish, they can create a more enduring, and occasionally, more lengthy life, yet are not being researched or used as often as they could.

Persons with AIDS have some of the same needs as do those in nursing homes, group homes, schools, and other populations with whom therapeutic recreation specialists are trained to work. Socialization, building self-esteem, emotional support, isolation, physical and emotional pain, recreative opportunities and leisure skills are all areas that therapeutic recreation and treatment of HIV positive individuals and persons with AIDS

have in common with the many other groups with which therapeutic recreation specialists work. Delivery of services must be researched and provided for this neglected population. An assessment should be the first step taken to learn and program for the exact needs of the members of the HIV/AIDS population, in regards to recreation and leisure.

Rationale for the Study

HIV positive individuals and persons with AIDS have a need to lengthen their physical lives, positively accept their condition, as well as continue with their lives on a daily basis and as routinely as possible. There is very little information presently available regarding the topic of therapeutic recreation in connection with this population. There appears to be a necessity to determine the individuals perceptions of recreation and leisure if professionals of therapeutic recreation are to provide appropriate services.

Purpose Statement

The purpose of this study was to explore the perceived freedom in leisure between HIV positive individuals and persons with AIDS.

Sub-problems included:

1. Determining the perceived leisure competence of HIV positive individuals and persons with AIDS.
2. Determining the perceived leisure control of HIV positive individuals and persons with AIDS.

3. Determining the leisure needs of HIV positive individuals and persons with AIDS.

4. Determining the depth of involvement in leisure experiences of HIV positive individuals and persons with AIDS.

Research Questions

Research questions for this study included:

1. What is the difference in perceived leisure competence between HIV positive individuals and persons with AIDS?

2. What is the difference in perceived leisure control between HIV positive individuals and persons with AIDS?

3. What is the difference in the leisure needs between HIV positive individuals and persons with AIDS?

4. What is the difference in the depth of involvement in leisure experiences between HIV positive individuals and persons with AIDS?

Delimitations

The delimitations of the study were:

1. The study of the disease AIDS.

2. Measuring perceived freedom in leisure.

3. The use of the Leisure Diagnostic Battery Short Form B as the primary assessment tool.

4. The criteria used to determine the selection of the assessment tool.
5. Only individuals who are associated with Triangle AIDS Network of Beaumont, Texas and Immunosize of Dallas, Texas.

Limitations

The study was limited by:

1. Availability of subjects through census of Triangle AIDS Network and Immunosize during the time frame the study was performed.
2. Inability to control stage of illness of subjects.
3. Possibility of illnesses which stem from AIDS that may cause lapses in energy and movement.
4. Possible mortality and morbidity rates within the population.
5. No therapeutic recreation assessments have been created, distributed or collected regarding the population under study.

Assumptions of the Study

The assumptions of the study were:

1. Degrees of reliability and validity of the LDB Short Form B regarding the population in the study.
2. The subjects understood the directions given.
3. The sample used in the study is representative of the population at large.
4. The participants were honest in their answers.

Definition of Terms

For the purpose of this study the following definitions were used:

AIDS: Acquired Immunodeficiency Syndrome is the result of the HIV 1 virus. AIDS is a disease in which the body's immune system breaks down.

Assessment: The process of gathering information about an individual in order that the most appropriate services may be provided to diminish or eliminate the individual's problems with his/her leisure (Stumbo and Thompson, 1986).

Depth of Involvement: Depth of involvement involves the satisfying of an individuals intrinsic needs and optimizing their overall leisure functioning. Questions in this scale ask individuals to indicate to what extent attention is focused, perceptions of time are altered, the occurrence of feelings of power and control appear when involved in recreation activities (Ellis and Witt, 1989).

HIV 1: Human immunodeficiency virus which is a virus that enters the body and infects the T-cells where the virus grows. As the T-cells are killed slowly by the virus, the body's ability to fight infection weakens (U.S. Department of Health and Human Services, 1994). HIV 1 is the basis of AIDS.

HIV positive individuals: Individuals infected with the human immunodeficiency virus, but not yet at the stage, or showing symptoms, of AIDS.

Immunosize: An organization in Dallas, Texas which is run by certified physical trainers. The clients participate in exercise programs and learn about the importance of a healthy lifestyle as well as their illness.

Leisure Diagnostic Battery Short Form B: The Leisure Diagnostic Battery is "...a

copyrighted collection of instruments..." (Burlingame, 1990). The LDB Short Form

B measures the perceived freedom in leisure of individuals. The Short Form B is comprised of 25 questions taken collectively from four of the five scales in the Long Form C: (A) perceived leisure competence; (B) perceived leisure control; (C) leisure needs; (D) depth of involvement in leisure; and (E) playfulness scale. No questions are used from the playfulness scale on the Short Form B.

Leisure lifestyle: "The day to day behavioral expression of one's leisure-related attitudes, awareness, and activities revealed within the context and composite of the total life experience." (Peterson, 1981).

National Therapeutic Recreation Society: The professional organization established to meet the professional needs of Therapeutic Recreation personnel.

Perceived Leisure Competence: A description of an individual's beliefs regarding his or her ability to control their outcomes in leisure participation and avoid failure. The more successful a person feels regarding their abilities, the more inclined they are to feel more free in their leisure involvements (Ellis and Witt, 1989).

Perceived Leisure Control: The degree to which an individual feels he or she can control the development and outcome of any leisure pursuit. A person who feels they are adept at performing in a leisure activity feels that the outcomes are due to their control over the situation. The sense of control may stem from persuasiveness, being crafty, or performing in an environment which allows the participant to make choices (1989).

Perceived Leisure Freedom: That which is measured by the LDB Short Form B.

Perceived Leisure Needs: The intrinsic feelings which result in positive feelings of freedom when a person participates in leisure activities. Activities involving relaxation, arousal and a need for creative expression are included in the scale measuring leisure needs (Ellis and Witt, 1989).

Person with AIDS: (PWA) Individuals having reached the stage of AIDS after being HIV positive for however long. Individuals with AIDS prefer to be referred to as persons with AIDS rather than AIDS victims. In this paper PWAs is used to refer to the plural of PWA, when the abbreviation is used.

Therapeutic Recreation: To facilitate development, maintenance, and expression of an appropriate leisure lifestyle for individuals with physical, mental, emotional, or social limitations. The process of therapeutic recreation is the selection, development, implementation, and evaluation of goal-oriented services based on individual assessment and program referral procedures (Gunn and Peterson, 1984).

Therapeutic Recreation Specialist: A professional who creates recreational opportunities for clients through referral, counseling, education or actual program involvement. A therapeutic recreation specialist enhance clients' leisure ability through professional programs and services through which the client can learn to eliminate barriers to leisure, develop leisure skills and attitudes, and optimize leisure involvement. A therapeutic recreation specialist is certified through the National Council for Therapeutic Recreation Certification.

Triangle AIDS Network: A non-medical community based organization to which HIV positive individuals and persons with AIDS are able to become associated. Health programs as well as community involvement opportunities are abundant within the organization.

Data Collection

The data were obtained from HIV positive individuals and persons with AIDS who were associated with Immunosize of Dallas, Texas and Triangle AIDS Network of Beaumont, Texas. The data were obtained using the Leisure Diagnostic Battery Short Form B.

Summary

Chapter one introduced the topics of HIV, AIDS, and therapeutic recreation. The purpose of the study was identified, to explore the perceived freedom in leisure between HIV positive individuals and persons with AIDS. Also identified were the sub problems, research questions, delimitations, limitations, assumptions definitions and data collection used throughout the study.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

This study was concerned with exploring the perceived freedom in leisure between HIV positive individuals and persons with AIDS. This chapter is a review of the literature compiled in the following manner: (a) history and facts of HIV and AIDS; (b) the population involved and current statistics; (c) therapeutic recreation needs for HIV positive individuals and persons with AIDS; (d) the Leisure Diagnostic Battery Short Form B; and (e) methodology.

History and Facts of HIV and AIDS

Dr. Goethe Rask's autopsy showed that her lungs were filled with organisms known as *Pneumocystis carinii*, a rare pneumonia which had suffocated the woman. Nobody died of *Pneumocystis*, which raised many questions. Dr. Rask had been working in Central Africa, where the medical conditions alluded many diseases. Needles were used repeatedly until they broke, gloves were worn during surgical procedures until they were worn thin, at which point, surgeons would risk dipping their hands in the patient's blood; whatever was needed. Dr. Ib Bygbjerg, a young colleague of Dr. Rask, had been visiting her in Zaire in 1976 when he noticed how tired and exhausted she easily became for hours at a time. On that Christmas Eve, he also noticed her extreme loss of weight which resulted from a mysterious diarrhea. The forty-six year old woman's lymph glands were

swollen and had been so for almost two years. In November of 1977, Dr. Rask returned to her home in Hjardmeall, Denmark, to die at the age of forty-seven.

Dr. Bygbjerg wanted to begin research on the disease which had mysteriously overtaken his colleague, but many "wiser" professors dissuaded him and guided him towards work in malaria. "Don't study Pneumocystis, they told him, it was so rare that there would be no future in it" (Shilts, 1988). Dr. Bygbjerg was turned away from what sadly has become the future for hundreds of thousands of people: AIDS.

"Make no mistake about it, AIDS is horrible, sick, foul, filthy disease. I look great to everybody. But I don't feel great. My life is an endless round of doctor's visits, night sweats, chronic yeast infections, debilitating medications and body-numbing fatigue"

(Lewis-Thornton, 1994). HIV is a very fragile virus and can only survive inside the body. HIV, therefore, can only be contracted through intimate contact between an infected individual and an uninfected individual through semen, blood, vaginal secretions, or breast milk (in some cases) that contain HIV (Centers for Disease Control [CDC], 1995).

Literature (U.S. Department of Health and Human Services, 1994) informs the public that AIDS has only been proven to be spread through: (a) Sexual intercourse (anal, oral or vaginal); (b) sharing of hypodermic needles and syringes (drug use); (c) an infected mother to her baby before and during birth (sometimes after and through breast feeding as well); (d) by receiving a blood transfusion, which has dramatically decreased due to the careful screening and laboratory testing of the blood supply which began in 1985.

AIDS has not been proven to be spread through casual contact. Shaking hands, swimming in public pools, sneezing, mosquitos, using toilet seats, sharing household or

workplace items, even sweat and tears do not spread the virus. AIDS is carried in the semen and blood and must make contact with open areas on the skin in order to be acquired (Tennessee Department of Health, 1993). Elaine N. Marieb and Jon Mallat (1992) write:

Though the disease is not spread by casual contact, some extremists are demanding that AIDS-infected children be kept out of the schools. Some employees are demanding AIDS testing before (emphasis added) hiring, and insurance companies are denying insurance to those who will not submit to an AIDS test.

Despite widespread reports that casual contact does not spread the virus, families have walked out of restaurants that employed gay waiters and hospital workers have quit rather than treat HIV positive individuals and persons with AIDS. In 1989, a man was barred from coaching his daughter's intramural basketball team in Anderson, Indiana, because he had been diagnosed with AIDS. The thirty-seven year old father had received the virus through a blood transfusion (Siano, 1993).

Once an individual discovers they are HIV positive, they are faced with tasks such as creating a will, (if they have not done so already), estate planning, and making funeral and burial arrangements. These tasks are difficult regardless of age or disability, but imagine being a twenty-five year old with a T-cell count below 200, meaning a diagnosis of AIDS. This scenario is very depressing for those who must live it. This is where therapeutic recreation can improve quality of and outlook on life. Give these individuals something to look forward to such as group outings and activities. Give them reasons to

keep their focus on the positives, not the negatives, of their lives, just as with any person who has a disability.

Population and Current Statistics

Persons with HIV and AIDS experience intense stigmatization and discrimination. This statement is not surprising since AIDS was first identified, and continues to occur most frequently, in socially stigmatized groups such as homosexual men and IV drug users. This stigma and discrimination creates a barrier to effective services for individual who are HIV positive or have AIDS. According to Debra J. Jordan (1994):

It is no secret that society tends to value certain traits over others...the more highly valued traits tend to be: the age of 25-45, Caucasian race, Anglo-Saxon heritage, male sex, able-bodied and attractive physique, tallness, physical fitness, and heterosexual orientation...within the larger society a person with these primary characteristics tend to receive better treatment in all areas of life.

An individual with HIV positive status maintains most or all of these attributes, but loses these traits as their disease physically progresses. Social isolation, a decrease in physical fitness and a decrease in abilities for everyday functionings are just three problems a person with AIDS must face. An individual who is HIV positive has the ability to perform at a higher level of physical activity than a person with AIDS because of the lower physical functionings that occur as HIV turns into AIDS.

In a biographical article written by Muriel L. Whetstone (1995), Rae Lewis-Thornton is quoted as saying, "...the bottom line is you're going to be filled with pain,

physical pain. And you are going to have to take pills. And you're going to have to regroup every day because each day AIDS is like the jack that jumps out of the box". Each time that jack jumps out, a little more is taken from the physical life of a person with AIDS.

As of June 1996, men who have sex with men accounted for 51% of the reported cases of AIDS, while IV drug users accounted for 25%; however, there remains a steady increase in cases among women during the past decade. These statistics represent those persons thirteen years of age and older (National AIDS Hotline, 1996). The majority of reported cases were residents of New York, California, Florida, Texas and New Jersey (CDC, 1994). Texas alone, through June 1996, had 30,937 reported cases of AIDS (Texas Department of Health, 1996). Globally, reported AIDS cases have reached 1,291,810, however the estimated number of unreported added to the reported cases reaches over 3 million cases. HIV estimates are at an astounding 17 million cases. It is estimated that by the year 2000, there will be 40 million persons with HIV (CDC, 1994).

AIDS affects every race, age, color and sex. This continually growing population includes hundreds of thousands of individuals that must be faced, not left behind. Again, the words of Rae Lewis-Thornton (1995) stand strong, "We can't let it have everything. We cannot let it take our spirit".

Need for Therapeutic Recreation

There are three specific areas of professional services employed to provide the comprehensive leisure ability approach toward enabling appropriate leisure lifestyles:

therapy, leisure education, and recreation participation. Each use similar deliver processes, using assessment or identification of client need, development of a related program strategy, and monitoring and evaluating client outcomes. The purpose of the therapy service area is to improve functional behaviors. The purpose of the leisure education area is to provide opportunities for the acquisition of skills, knowledge and attitudes related to leisure involvement. The purpose of the recreation participation area of therapeutic recreation service is to provide opportunities which allow voluntary client involvement in recreation interests and activities (Gunn and Peterson, 1984). Therapeutic recreation for HIV positive individuals and persons with AIDS involves: (1) Assessment; (2) Treatment and rehabilitation; (3) Education; (4) Health Promotion. Extensive research has shown no initial assessment performed with any members of the population under study regarding therapeutic recreation. How are therapeutic recreation professionals supposed to create treatment and rehabilitation programs for persons with AIDS if the needs of the population have not been assessed, and therefore, not known? Therapeutic recreation professionals experience tremendous diversity in the type of work that we do and the type of people with whom we have come into contact (Jarvi, 1993). According to Arnold Grossman (1993):

Recreation and leisure professionals have the capacity to provide equality and freedom to people with HIV/AIDS through leisure. Through leisure experiences individuals with HIV/AIDS can enhance their feelings of self-esteem and integrity. In addition, they can achieve a sense of intimacy, intrinsic satisfaction, empowerment, and hope. They can also learn to cope with free time

in spite of joblessness, separation from families and significant others, loneliness and loss of identity and declining health.

The Chris Brownie Hospice in Los Angeles, California, is a certified model of hospice care for persons with AIDS. The recreation program in place at the hospice is run by volunteers because of low funding. The physical limitations of the patients have made group programming trying on the staff and many patients have a fear of forming relationships with others who are dying, which confines socialization efforts (Kling, 1991). Amendments must be made to many of the traditional ideas of therapeutic recreation and flexibility must be a top priority with this population. Kling also reports that therapeutic recreation has the potential for reducing feelings of helplessness and increasing self awareness by focusing on the people's abilities rather than their disabilities.

"AIDS clearly extends beyond the need of medical intervention. It also requires intervention in reducing the stressors associated with the complex social and psychological needs of those diagnosed" (Caroleo, 1988). Simply bringing persons with AIDS together with their significant others in relaxing, supportive and informal social settings can be an important aspect for therapeutic recreation programs. Structured and non-structured programs can be offered to provide fun and enjoyable opportunities. Therapeutic recreation professionals have limitless opportunities in this area of intervention, if they would only become more aware of and involved with the population. "The challenge of HIV/AIDS faces us as do the faces of people with HIV/AIDS" (Grossman, 1993). Are we rising to meet the challenge?

Leisure Diagnostic Battery Short Form B

The Leisure Diagnostic Battery (LDB) is one of the first assessments specifically designed for recreation therapists, researchers, and other human service professionals who desire to assess a person's leisure functioning. There are both long and short forms of the instrument as well as adolescent and adult versions of both forms. The short form, Version B, was chosen for this study which is a shortened adult version of the long adult version, Version C. Version C is the adult version of Version A, the original long form of the LDB. Version A was originally designed for adolescent orthopedically impaired individuals and higher functioning individuals with mental retardation (Burlingame, 1990). Version B consists of twenty-five questions which were collectively gathered from four out of five scales from Version C. The four scales include: (a) Scale A-perceived leisure competence; (b) Scale B-perceived leisure control; (c) Scale C-leisure needs; (d) Scale D-depth of involvement in leisure experiences. The fifth scale, from which no questions are used in the short form, is the playfulness scale.

The LDB was developed using a state of the mind approach to understanding leisure functioning, which describes how an individual feels about his or her leisure experiences. "The LDB...involves the assessment of a client's perceived freedom in leisure and factors which are potential barriers to this freedom" (Ellis and Witt, 1989). The purposes of the LDB are:

- (1) To enable users to assess their clients' leisure functioning.
- (2) To enable users to determine areas in which improvement of current leisure functioning is needed.

- (3) To enable users to determine the impact of offered services on leisure functioning.
- (4) To facilitate research on the structure of leisure to enable a better understanding of the value, purpose, and outcomes of leisure experiences (1989).

The development of the LDB Short Form B began when many initial users of the LDB long forms were concerned about the long length of time required for the long form. Researchers also expressed interest in an instrument which could be completed in a shorter amount of time. The twenty-five questions on the Short Form B were chosen directly by selecting the items that had the highest correlation with the total score of the 95-item long form minus the selected item (1989).

Methodology

"Several data sets have been collected which can be used to provide evidence of the reliability and validity of the LDB Short Forms Versions A and B" (Ellis and Witt, 1989). Due to the similarity of Version B with Version A, it is expected to produce similar levels of validity and reliability. Alpha reliability data ranges from .83 to .94 taken from seven samples and ranges. These are consistent with alphas taken from the long form Version A. A study which consisted of 292 members of the National Stutterers Project was conducted utilizing the LDB Short Form B. The mean age range was 36-45 and 75% of the participants were male. The overall scale mean was 3.59, the items being scored on a five point scale. The alpha reliability was .90. A second study consisted of

116 persons associated with the Milwaukee Community Leisure Enrichment Program for disabled individuals. The mean age range was 40.5 and 53% of the participants were male. The overall scale mean was 3.88 and the alpha reliability was .88.

A subject's score on a certain scale is composed of many parts which can consist of test environment interruptions of difficulties related to the test itself. Another type of factor influencing reliability and validity is determined by the scale itself, such as lack of item clarity and ambiguity. Age appropriateness of the items can contribute to an individual's score as well. Although this appears to be a simple questionnaire type of assessment, the researcher must keep all of these possible intrusions to reliability and validity as minimal as possible.

Summary

Chapter two was a review of the literature used as a background for the study. The literature was compiled into the following four areas: (a) History and facts of HIV and AIDS; (b) the population involved and current statistics; (c) Therapeutic recreation needs for HIV positive individuals and persons with AIDS; (d) the Leisure Diagnostic Battery Short Form B. The LDB Short Form B produces information in one main area of leisure functioning which is perceived leisure freedom. Possible constraints to leisure for HIV positive individuals and persons with AIDS can consist of illness, easy fatigue, negative attitude toward socialization, fear of new relationships because of possible loss, and simple ignorance of the non-infected populations to become involved. The use of the LDB can eventually lead to encouragement, praise, novelty, and challenge within activities

which would in turn, improve the leisure functioning of the population members. Further discussion of the LDB Short Form B is included in Chapter three.

CHAPTER III

METHODOLOGY

Introduction

This chapter identifies the procedures used in this study. The purpose of this study was to explore the perceived freedom in leisure between HIV positive individuals and persons with AIDS. The sub-problems included:

1. Determining the perceived leisure competence of HIV positive individuals and persons with AIDS.
2. Determining the perceived leisure control of HIV positive individuals and person with AIDS.
3. Determining the leisure needs of HIV positive individuals and persons with AIDS.
4. Determining the depth of involvement in leisure experiences of HIV positive individuals and persons with AIDS.

The research questions included:

1. What is the difference in perceived leisure competence between HIV positive individuals and persons with AIDS?
2. What is the difference in perceived leisure control between HIV positive individuals and persons with AIDS?
3. What is the difference in the leisure needs between HIV positive individuals and persons with AIDS?

4. What is the difference in the depth of involvement in leisure experiences between HIV positive individuals and persons with AIDS?

The procedures for this section were presented as follows: (a) identification of the population; (b) identification of the sample; (c) determination of the instrument; (d) administration of the instrument; and (e) presentation of data.

Population

The population of the present study consisted of 340 individuals diagnosed as either HIV positive or as having AIDS. Both groups consisted of individuals who were associated with Triangle AIDS Network of Beaumont, Texas and Immunosize of Dallas, Texas. The clients associated with these community based organizations do not receive inpatient or outpatient medical services from the organizations.

Sample

The subjects for this study were identified from their association with Triangle AIDS Network and Immunosize and were those willing to participate in a therapeutic recreation exploratory study. Letters of introduction were given to the individuals. Each subject was ensured confidentiality, right to privacy, and the right to professional responsibility as indicated in the introduction letter. The individual consented to participate in the study by completing an assessment.

There were 280 LDB Short Form B assessments delivered to the director of Triangle AIDS Network to be given out and sixty distributed to an administrative

associative of Immunosize. The assessments were distributed on a random basis by one staff member from each agency to their respective members. The agency representatives sent the returned questionnaires to the researcher in a sealed envelope to ensure confidentiality. The number of returned assessments was forty-one (12.1%), however, two were unusable due to incomplete answers. Of the usable thirty-nine returns (11.5%) those who were HIV positive consisted of twenty individuals or 51%. The number of respondents with AIDS was nineteen persons or 49%. There were four female respondents (10%), and thirty-five male respondents (90%).

Instrumentation

A review of the literature was done to determine what instruments were available to the researcher to measure the perceived freedom in leisure among HIV positive individuals and persons with AIDS. There was no specific assessment for the particular population under study, however there were several assessment available for measuring the leisure needs of individuals. The instrument used in this study was the Leisure Diagnostic Battery (LDB) Short Form B (Ellis and Witt, 1989). The Short Form B was chosen because of financial constraints and the limited amount of time available to the researcher for completion of the study.

The four-fold purpose of the Leisure Diagnostic Battery includes assessing the client's leisure needs, determining areas in which improvement of current leisure functioning is needed, determining the impact of offered services on the client's leisure functioning, and facilitating research on the structure of leisure to enable a better

understanding of the value, purpose, and outcomes of leisure experiences (Burlingame, 1990).

The Short Form B, which consisted of twenty-five questions, measures perceived freedom in leisure. The twenty-five questions were collectively taken from four of the five scales on the long form Version C, which is the parent form of the Short Form B. The distribution of the questions from the four scales are as follows: (a) five questions from Scale A: Perceived leisure competence; (b) ten questions from Scale B: Perceived leisure control; (c) six questions from Scale C: Leisure needs; (d) four questions from Scale D: Depth of involvement in leisure experiences.

The LDB Short Form B was also chosen because it had been standardized with an acceptable validity and reliability of .89 and .91 respectively. The instrument is available in a variety of long and short forms. The test was easy to administer and score. The results can provide a helpful resource for optimizing leisure functioning for clients (1990).

Administration of the Instrument

The Leisure Diagnostic Battery Short Form B was given as a measure of perceived freedom in leisure and was administered once to the subjects in the study, requiring ten minutes to administer. Copies of the instrument were sent to each agency to be administered to the subjects for the convenience of the individuals participating in the study. Permission could not be obtained to hand out the assessments personally due to a desired anonymity for the subjects. The subjects were asked to return the questionnaire by August 31, 1996. Participants responded to twenty-five questions regarding their

perceived freedom in leisure. Choices given for all statements ranged from Strongly Agree to Strongly Disagree. Participants were also asked HIV status, age and gender to aid researcher in delegating assessment answers to their appropriate sub-problem.

Follow-up attempts were made in order to improve the return rate of assessments from non-respondents. The contacts were made to the director of Triangle AIDS Network and the administrative associate of Immunize no less than twice a week until the deadline date of August 31, 1996. Due to the desired anonymity of the subjects, personal contact was only allowed with the staff members of both organizations.

Presentation of Data

Data analysis consisted of utilizing Microsoft Excel 5.0. The majority of data were hand scored, which took approximately five minutes per assessment to score. The questions were scored according to the following five point system: (a) Strongly Agree=5; (b) Agree=4; (c) Neither=3; (d) Disagree=2; and (e) Strongly Disagree=1. Low scores indicated little leisure knowledge (Ellis and Witt, 1989). The twenty-five questions were divided into four categories which corresponded with the four scales from the Long Form Version C, from which the questions came.

The scores of each question in each category were added together providing a total score per question, which was then divided by nineteen for responses from persons with AIDS and twenty for responses from HIV positive individuals, resulting in a mean score for each question. The mean scores per question were then added together in their respective category and divided by the number of questions in the category, to present a

sub-scale mean score. The mean scores of each sub-scale were added together and divided by four to obtain a mean of the means score.

Summary

Chapter three was a presentation of the procedures used in the study, which were an identification of the population, an identification of the sample, determination of the instrument, administration of the instrument and presentation of data. Chapter four includes the presentation of the results of the study.

CHAPTER IV

PRESENTATION OF DATA

The purpose of this study was to explore the perceived freedom in leisure between HIV positive individuals and persons with AIDS. This study utilized the Leisure Diagnostic Battery Short Form Version B. The participants in this study were clients of Triangle AIDS Network in Beaumont, Texas and Immunosize in Dallas, Texas. There were forty-one returned questionnaires this study.

The study sample consisted of thirty-nine individuals since two returns were incomplete and therefore unusable. The thirty-nine usable assessments represented 11.5% of those delivered to the two participating agencies. The individual's responses were categorized by age of individual, gender of individual and stage of HIV of individual.

In this chapter, the results of the study are summarized, reported and discussed. The results are presented in five sections: (a) participant profile; (b) differences in perceived leisure competence between HIV positive individuals and persons with AIDS; (c) differences in perceived leisure control between HIV positive individuals and persons with AIDS; (d) differences in the leisure needs between HIV positive individuals and persons with AIDS; and (e) differences in depth of involvement in leisure experiences between HIV positive individuals and persons with AIDS.

Participant Profile

Determination of the age of each participant was based on their response to question one on the background data sheet, which asked, "Age of Participant: (circle one of the following) 0-15, 16-20, 21-25, 26-30, 31-35, 36-40, 41-45, 45+." Figure 1 demonstrates the age distribution of the thirty-nine usable responses. The results indicated four (10%) persons were in the 21-25 age group, four (10%) persons were in the 26-30 age group, thirteen (33%) persons were in the 31-35 age group, seven (18%) persons were in the 36-40 age group, eight (21%) persons were in the 41-45 age group, and three (8%) persons were in the 45+ age group.

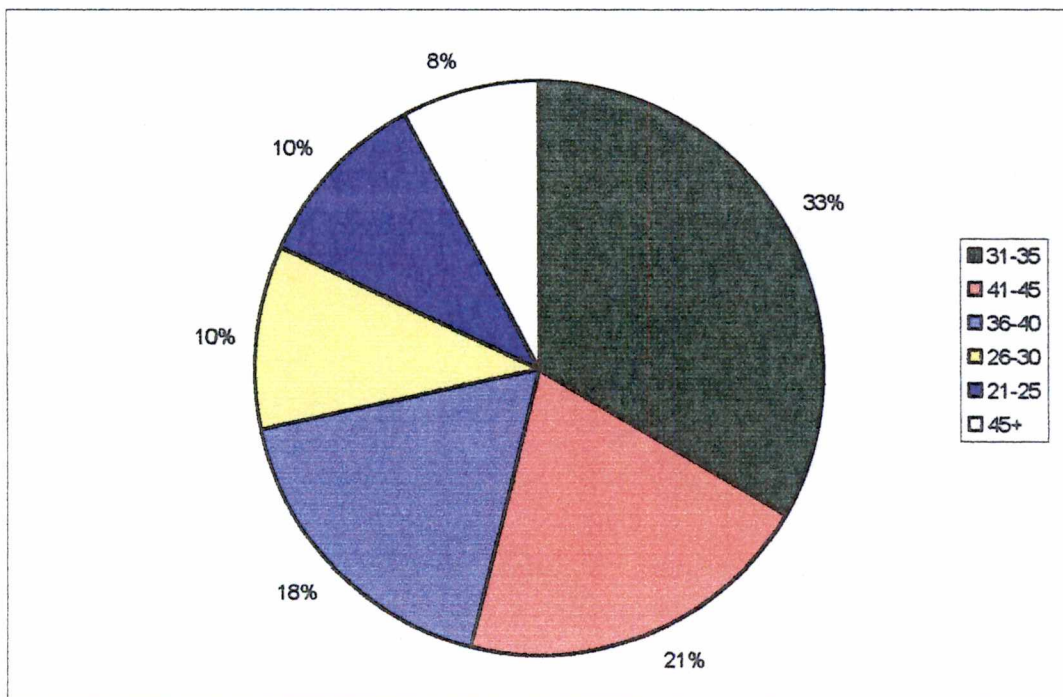


Figure 1. Age Groups of Participants

Determination of the gender of the participants was based on the responses to question two on the background data sheet. The results indicated four of the thirty-nine participants (10%) were of female gender and the remaining thirty-five participants (90%) were of male gender, as illustrated in Figure 2.

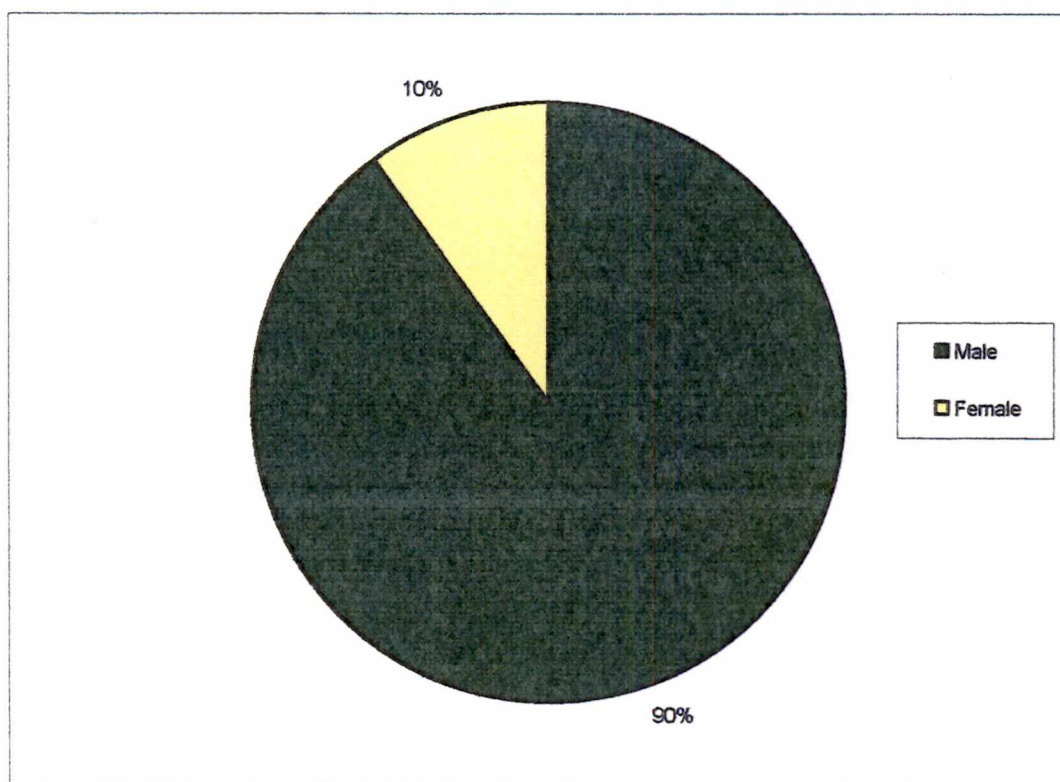


Figure 2. Gender of the Participants

The responding participants were also classified according to their present stage of HIV, which was provided by responses to question three on the background data sheet. Figure 3 demonstrates that twelve (31%) of the responding participants reported their

stage of HIV to be asymptomatic, meaning they are not showing any signs or symptoms of HIV/AIDS, but they are HIV positive. A few of the responding participants, eight (20%), reported their stage of HIV to be symptomatic, meaning they are beginning to show signs such as night sweats and fatigue. Almost half of the responding participants, nineteen (49%), reported their stage of HIV to be AIDS, which is the final stage of the progression of the disease.

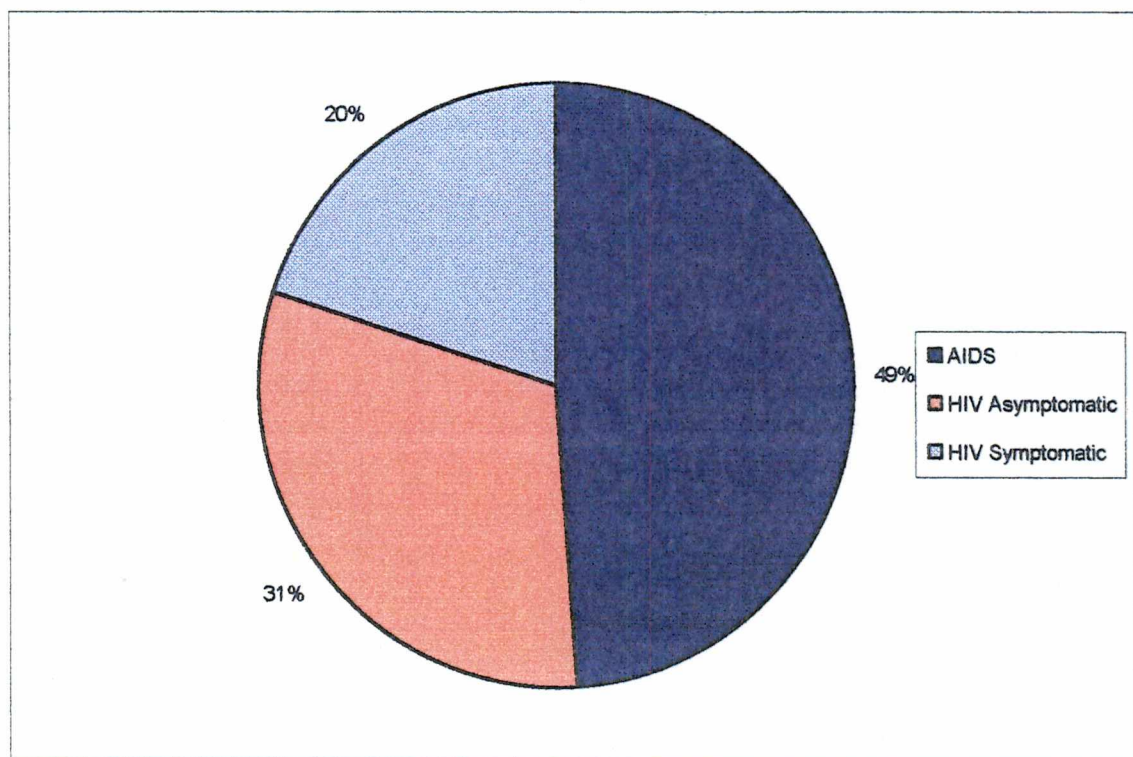


Figure 3. Stage of Illness of Participant.

Research Question One: What is the difference in perceived leisure competence between
HIV positive individuals and persons with AIDS?

The Leisure Diagnostic Battery Short Form B consisted of twenty-five questions relating to an individual's perceived freedom in leisure. The twenty-five questions were divided by the researcher into four categories, which corresponded with the four scales from the Long Form Version C, from which the twenty-five questions were initially taken. The four categories included: 1) perceived leisure competence (scale A); 2) perceived leisure control (scale B); 3) leisure needs (scale C); 4) depth of involvement in leisure experiences (scale D). These four categories aided in exploring the perceived freedom in leisure among HIV positive individuals and persons with AIDS.

The first category of questions corresponded with Scale A, which measures perceived leisure competence. Five questions on the Short Form B were taken from Scale A on the Long Form Version C. The five questions, numbered as they appeared on the Short Form B, were as follows:

2. "I know many recreation activities that are fun to do."
4. "I have the skills to do the recreation activities in which I want to participate."
6. "It is easy for me to choose a recreation activity in which to participate."
12. "I am good at the recreation activities I do with other people."
14. "I am good at almost all the activities I do."

As illustrated in Table 1 and Figure 4 on the following page, the responses from both HIV positive individuals and persons with AIDS were very similar. As evidenced

Table 1. Differences in Perceived Leisure Competence Between HIV Positive Individuals and Persons with AIDS

<u>LDB Questions</u>	<u>HIV Positive Individuals</u>	<u>Persons with AIDS</u>
	<i>M</i>	<i>M</i>
2	4.2	4.2
4	4.2	4.1
6	3.8	3.8
12	4	3.9
14	3.6	3.5
Sub-scale Mean	3.9	3.9

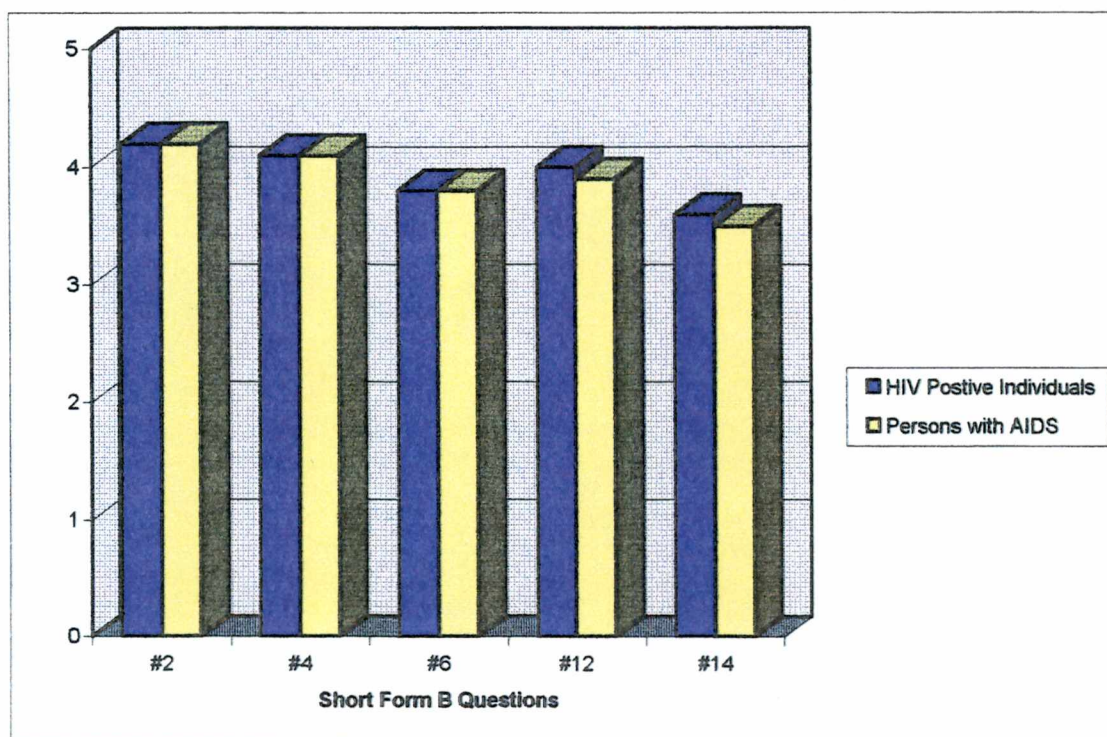


Figure 4. Differences in Perceived Leisure Competence Between HIV Positive Individuals and Persons with AIDS

by question 2, the mean scores for both HIV positive individuals and persons with AIDS was 4.2, meaning that they both tended to agree and strongly agree with the question more than disagree. Question 4 also illustrates the similarity between the two groups with the mean scores being an identical 4.1. Two questions, numbers 12 and 14 differed by one tenth of a point on the mean scores between HIV positive individuals and persons with AIDS. The sub-scale scores for both groups were both 3.9. These data showed that out of the thirty-nine usable questionnaires, the majority of participants agreed with the questions regarding perceived leisure competence, which is a measure of an individual's beliefs regarding his or her ability to control their outcomes in leisure participation. Members in both groups agreed more than disagreed with the belief that they are able to control their outcomes in leisure participation.

**Research Question Two: What is the difference in perceived leisure control between
HIV positive individuals and persons with AIDS?**

The second category of questions corresponded with Scale B which measures perceived leisure control. Thirteen questions on the Short Form B were taken from Scale B on the Long Form Version C. The thirteen questions, numbered as they appeared on the Short Form B, were as follows:

3. "I can do things to improve the skills of the people I do recreation activity with."
7. "I can do things during recreation activities that will make other people like me more."

9. "I can make a recreation activity as enjoyable as I want it to be."
10. "I can do things during a recreation activity that will enable everyone to have more fun."
11. "I usually decide with whom I do recreation activities."
15. "I can enable other people to have fun during recreation activities."
17. "I can usually persuade people to do recreation activities with me, even if they don't want to."
18. "I can make almost any activity fun for me to do."
19. "I participate in recreation activities which help me to make new friends."
20. "I can make good things happen when I do recreation activities."
22. "I can do things to make other people enjoy doing activities with me."

As illustrated in Table 2 and Figure 5, a higher variance was detected in the mean scores in the category of questions. As evidenced by question 7, the mean score for HIV positive individuals was 3.5, while the mean score for persons with AIDS was 3.0, which indicated that more HIV positive individuals tended to agree with the question, rather than choosing Neither, Disagree or Strongly Disagree. Question 17 had an even larger difference between the two mean scores. HIV positive individuals had a mean score of 3.6 on question 17, while persons with AIDS had a mean score of 2.6, which is the largest difference among all twenty-five questions on the assessment. Question 19, again, had a large difference between HIV positive individuals, whose mean score totaled 3.9, and persons with AIDS, whose mean score totaled 3.3. According to the sub-scale mean scores from the second set of questions, persons with AIDS appeared to feel as though

Table 2. Differences in Perceived Leisure Control Between HIV Positive Individuals and Persons with AIDS

<u>LDB Questions</u>	<u>HIV Positive Individuals</u>	<u>Persons with AIDS</u>
	M	M
3	4.1	3.7
7	3.5	3
9	4.1	4.1
10	3.6	3.5
11	3.9	3.9
15	3.6	3.5
17	3.6	2.6
18	4.2	3.7
19	3.9	3.3
20	4	3.5
22	3.8	3.4
Sub-scale Mean	3.8	3.5

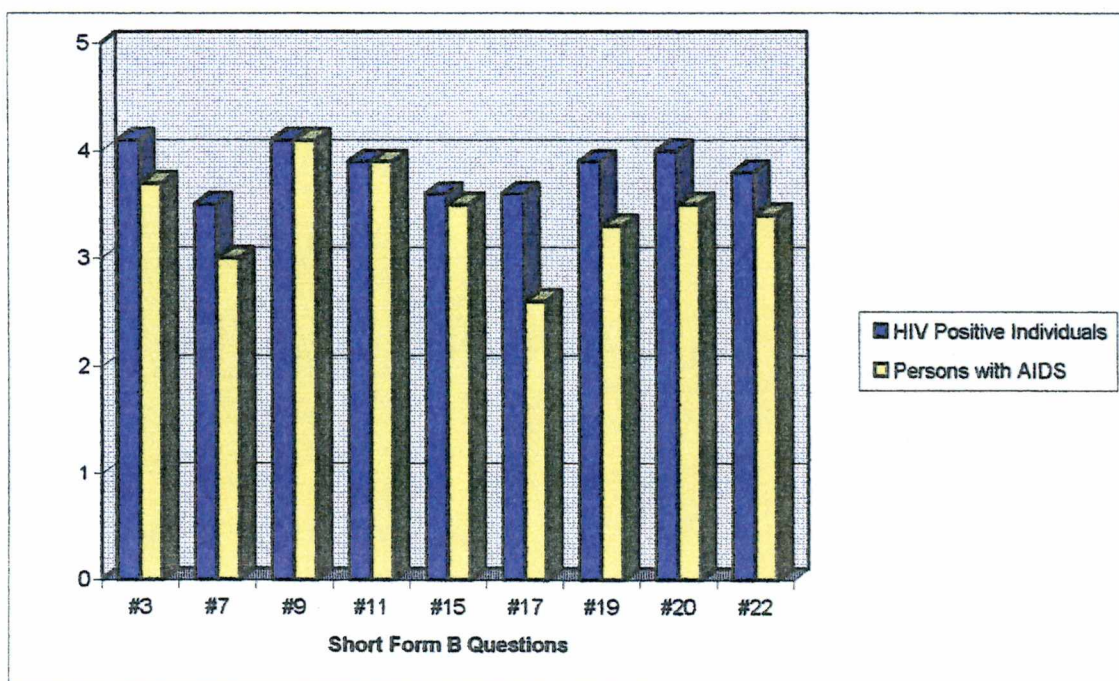


Figure 5. Differences in Perceived Leisure Control Between HIV Positive Individuals and Persons with AIDS

they did not have the control over the development and outcome of leisure pursuits that HIV positive individuals appeared to maintain, which could stem from their decreased self-confidence and self-esteem as their disease progresses and becomes more noticeable and physically burdening.

Research Question Three: What is the difference in the leisure needs between HIV positive individuals and persons with AIDS?

The third category of questions were collected from Scale C, which measures leisure needs. Five questions on the Short Form B were taken from Scale C, which is a scale from the Long Form Version C. The five questions, which are numbered as they appeared on the Short Form B, were as follows:

1. "My recreation activities help me to feel important."
8. "My recreation activities enable me to get to know other people."
13. "I am able to be creative during my recreation activities"
23. "When I feel restless, I can do recreation activities that will help me calm down."
24. "Sometimes when I do recreation activities, I get excited about what I'm doing."

As illustrated in Table 3 and Figure 6, the mean scores for this sub-scale are identical for both HIV positive individuals and persons with AIDS. The mean sub-scale scores for each group was 3.9, which is also the same as the mean sub-scale scores for the first category of questions which measured the differences in perceived leisure

Table 3. Differences in the Leisure Needs Between HIV Positive Individuals and Persons with AIDS

<u>LDB Questions</u>	<u>HIV Positive Individuals</u>	<u>Persons with AIDS</u>
	<i>M</i>	<i>M</i>
1	3.9	3.9
8	4.2	4
13	3.8	3.7
23	3.8	3.6
24	4	4.1
Sub-scale Mean	3.9	3.9

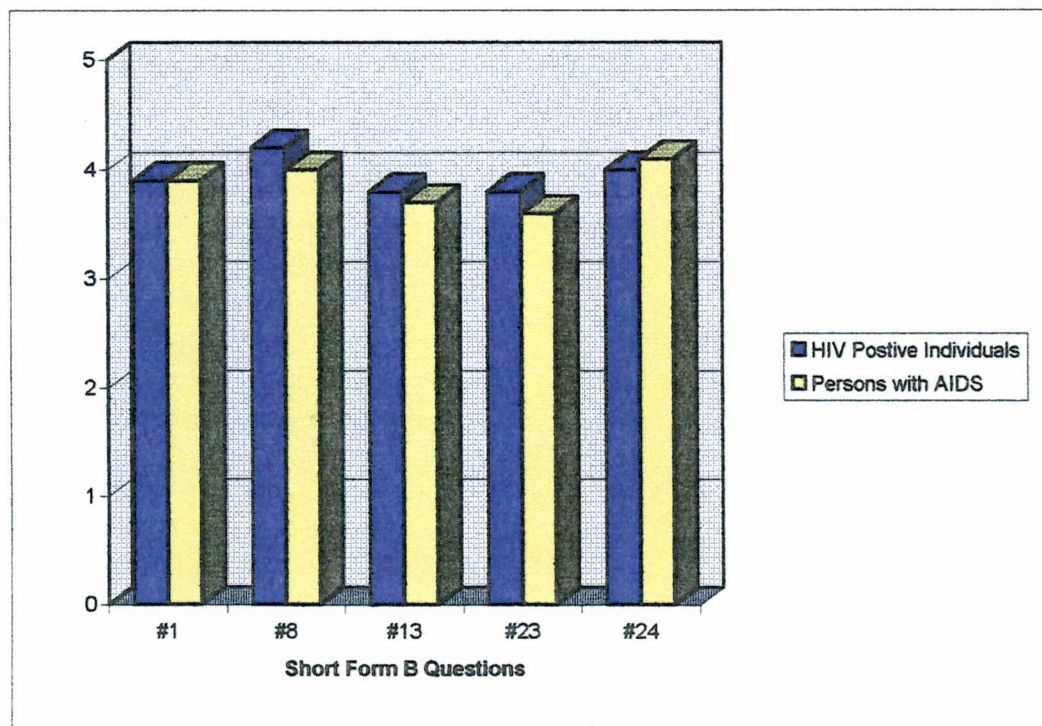


Figure 6. Differences in the Leisure Needs Between HIV Positive Individuals and Persons with AIDS

competence. Questions 8 and 23 had the largest difference in mean scores, however this difference was only two-tenths of a point. On question 8, HIV positive individuals had a mean score of 4.2, indicating a few Strongly Agree choices, while the persons with AIDS had a mean score of 4.0, indicating fewer Strongly Agrees, but overall, more responses were positive, rather than negative. Question 1, however, had identical mean scores for both groups, which was 3.9. According to the data, there did not appear to be a large difference in the leisure needs of HIV positive individuals and persons with AIDS, however, the lower numbers did appear among the responses of persons with AIDS. Leisure needs are defined as the intrinsic feelings which result in positive feelings of freedom for persons who participate in leisure activities. Both groups appeared to have these intrinsic feelings for leisure participation.

Research Question Four: What is the difference in the depth of involvement in leisure experiences between HIV positive individuals and persons with AIDS?

The fourth and final category of questions from the Short Form B were collected from Scale D, which measures depth of involvement in leisure experiences. The four questions on the Short Form B were taken from Scale D on the Long Form Version C. The four questions, which are numbered as they appeared on the Short Form B, were as follows:

5. "Sometimes during a recreation activity there are short periods when the activity is going so well that I feel I can do almost anything."
16. "During my recreation activities, there are often moments when I feel really

involved in what I am doing."

21. "When participating in recreation activities, there are times when I really feel in control of what I am doing."

25. "I usually have a good time when I do recreation activities."

As illustrated in Table 4 and Figure 7 on the following page, the sub-scale mean score for HIV positive individuals was higher, 4.1, than the sub-scale mean for persons with AIDS, 3.9. The largest difference was observed in the responses to question 21. HIV positive persons had a mean score of 3.9, which indicated several choices of Agree and a few Strongly Agrees, while persons with AIDS had a mean score of 3.5, which indicated fewer Agrees and Strongly Agrees. The mean scores for question 25 differed by three-tenths of a point, the higher score belonging with HIV positive individuals. Depth of involvement, which is defined as the satisfying of a person's intrinsic needs and optimizing their overall leisure functioning, could be observed as being more easily attainable for HIV positive individuals as evidenced by the higher mean scores. The higher mean scores could be due to their higher level of energy, physical health as well as mental health, when compared to persons with AIDS. Persons with HIV maintain a more healthy appearance, therefore providing them with a more secure sense of well-being, whereas a person with AIDS loses their healthy appearance and physical fitness as their illness progresses, providing them with a less secure well-being.

Table 4. Differences in Depth of Involvement in Leisure Experiences
Between HIV Positive Individuals and Persons with AIDS

<u>LDB Questions</u>	<u>HIV Positive Individuals</u>	<u>Persons with AIDS</u>
	<i>M</i>	<i>M</i>
5	3.9	3.8
16	4.3	4.3
21	3.9	3.5
25	4.2	3.9
Sub-scale Mean	4.1	3.9

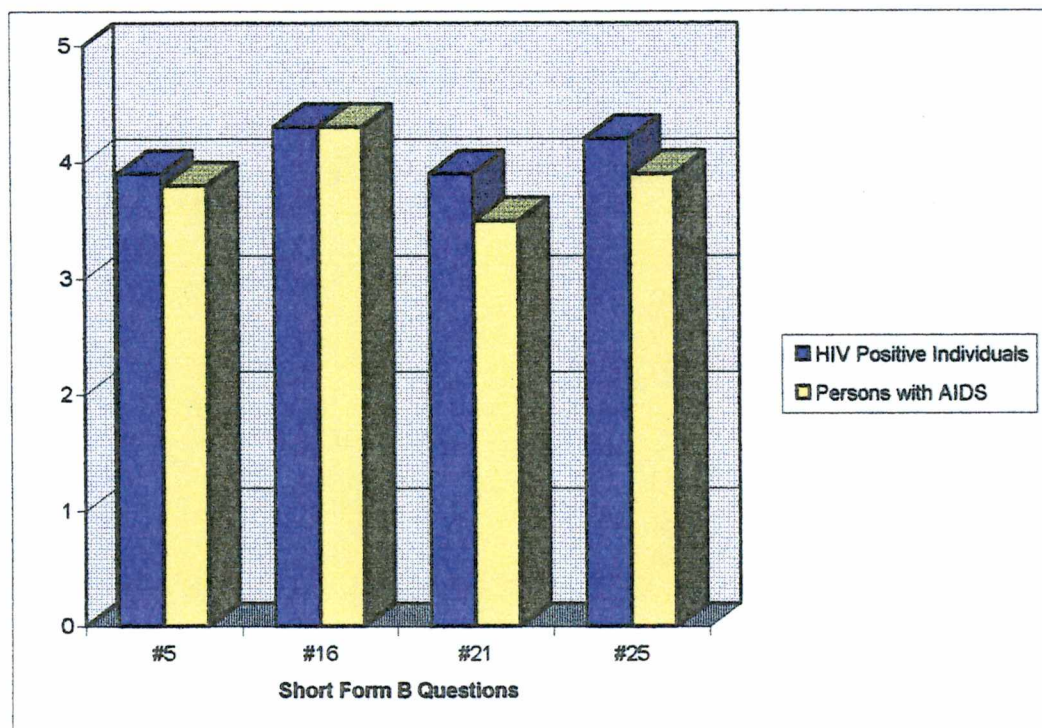


Figure 7. Differences in Depth of Involvement in Leisure Experiences Between
HIV Positive Individuals and Persons with AIDS

Discussion

The sub-scale scores are presented in Table 5. The mean of the means was presented after the four sub-scale means were added together and divided by four. The mean of the means for HIV positive individuals was 3.9, while the mean of the means for persons with AIDS was 3.8. It appears from the results there is no observable difference in the perceived freedom in leisure between HIV positive individuals and persons with AIDS.

Table 5. Differences in Perceived Freedom in Leisure Between HIV Positive Individuals and Persons with AIDS

<u>Sub-Scale</u>	<u>HIV Positive Individuals</u>		<u>Persons with AIDS</u>	
		<i>M</i>		<i>M</i>
A: Perceived Leisure				
Competence		3.9		3.9
B: Perceived Leisure				
Control		3.8		3.5
C: Leisure Needs		3.9		3.9
D: Depth of Involvement in				
Leisure Experiences		4.1		3.9
Mean of the Means		3.9		3.8

Summary

Chapter four was a presentation of the results of the study broken down into the following sections: (a) participant profile; (b) perceived leisure competence; (c) perceived leisure control; (d) leisure needs; and (e) depth of involvement in leisure experiences. The data were presented according to the age, gender and stage of illness of each participant, which was information included on each background data sheet received. Data were discussed under each section according to the research questions of the study.

CHAPTER V

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Summary of Study

In this study, data were gathered in order to explore the perceived freedom in leisure among HIV positive individuals and persons with AIDS. The population under study is commonly shunned by society because of their illness leaving them needy of both acceptance and avenues through which to receive the acceptance.

The literature review focused on the chronological history and development of the HIV/AIDS disease, from the late 1970's to the 1990's. This review provided the basis of the rationale for understanding the recreational and leisure needs of HIV positive individuals and persons with AIDS in order to pave the way for programs aimed at meeting these needs. The summation of the literature review was a discussion regarding the contributions therapeutic recreation can make in the lives of the population under study.

The method for accomplishing the exploration of perceived freedom of leisure for this study involved the use of the Leisure Diagnostic Battery Short Form B. Participants were randomly chosen from the clientele of two agencies which provided non-medical services for individuals who are HIV positive and persons with AIDS. Contacts were made by the researcher to the participating organizations to ensure distribution of the instrument to the participants.

The population subjects (N=340) were given a cover letter explaining the purpose

of the study, a background data sheet, and an assessment. From the 340 initial assessments delivered, a response rate of forty-one (12.1%) assessments were included in the study, however two were unusable due to incomplete answers resulting in thirty-nine returns or 11.5%.

The data were entered in to Microsoft Excel 5.0 for analysis and management. Data were analyzed by age, gender, and stage of HIV of the individual. Tables and figures were produced through Microsoft Excel 5.0. The body of the text was produced in WordPerfect for Windows, 6.0a. Data were presented and discussed according to the research questions in the following manner: (a) participant profile; (b) perceived leisure competence; (c) perceived leisure control; (d) leisure needs; and (e) depth of involvement in leisure experiences.

Findings

Findings for the study included:

1. Differences in perceived leisure competence between HIV positive individuals and persons with AIDS were not present. Both groups had a sub-scale mean of 3.9, which indicated there was no difference in the two groups in their perceived leisure competence.
2. Differences in perceived leisure control between HIV positive individuals and persons with AIDS were more observable than in perceived leisure competence. HIV positive individuals had a sub-scale mean of 3.8, while persons with AIDS had a sub-scale mean of 3.5.

3. Differences in leisure needs of HIV positive individuals and persons with AIDS were less observable than the differences in perceived leisure control. As with perceived leisure competence, both groups had sub-scale mean scores of 3.9.

4. Differences in depth of involvement in leisure experiences between HIV positive individuals and persons with AIDS appeared to be much like the observed differences in perceived leisure control. HIV positive individuals had a sub-scale mean of 4.1 and persons with AIDS had a sub-scale score of 3.9.

Conclusions

Conclusions drawn from the study include:

1. There is no observable difference in the perceived leisure freedom between HIV positive individuals and persons with AIDS.

Recommendations for Future Research

Recommendations for future research concerning recreation and leisure needs for HIV positive individuals and persons with AIDS may include:

1. An in depth assessment of the recreation and leisure needs of an organization serving this population.
2. A replication of the current study, utilizing more than two agencies to increase sample size.
3. Use of a self-designed survey may produce more detailed results.

Summary

Chapter five included a summary of the study, findings and conclusions based on data presentation, and recommendations for future study. The summary reviewed the purpose of the research, a review of the current literature, and implications for current practice. The findings were presented according to the research questions to which they pertained. The summary, conclusions and recommendations were provided for future research efforts.

BIBLIOGRAPHY

BIBLIOGRAPHY

- Buettner, L., & Kennison, J. (1993). Outdoor programming for older adults who are frail. Camping Magazine, 65, 38-42.
- burlingame, J., & Blaschko, T. M. (1990). Assessment Tools for Recreational Therapy: RedBook #1. Washington: Frontier Publishing.
- Caroleo, O. O. (1988). AIDS: Meeting the needs through therapeutic recreation. Therapeutic Recreation Journal, 22, 71-78.
- Centers for Disease Control and Prevention. (August, 1994). Facts about...Recent Trends in Reported U. S. AIDS Cases.
- Centers for Disease Control and Prevention. (1994). HIV/AIDS Surveillance Report. 6(no.2):[inclusive page numbers].
- Centers for Disease Control and Prevention. (1994). HIV Transmission Facts/HIV Prevention Facts.
- Ellis, G. D., & Witt, P. A. (1989). The Leisure Diagnostic Battery Users Manual. Pennsylvania: Venture.
- Grossman, A. H. (1993). The faces of HIV/AIDS. Parks and Recreation, 28, 44(3).
- Gunn, S. L., & Peterson, C.A. (1984). Therapeutic Recreation Program Design (3rd ed.). New Jersey: Prentice-Hall, Inc.
- Idol, C. (Speaker). (1995, April). [Interview].
- Jarvi, C. K. (1993). Leaders who meet today's changing needs. Parks and Recreation, 28, 19-25.
- Jordan, D. J. (1994). The wealth of diversity. Camping Magazine, 66, 56-59.
- Kling, C. (1991). Therapeutic recreation for end-stage AIDS patients. Parks and Recreation, 26, 8-13.
- Lewis-Thornton, R. (1994). Facing AIDS. Essence, 25, 62(6)
- Mallatt, J. , & Marieb, E.N. (1992). Human Anatomy. California: Benjamin/Cummings.

- National AIDS Hotline. (1996). 1-800-342-AIDS.
- National Therapeutic Recreation Society [NTRS]. (1982).
- Peterson, C. A. (1981, September). Leisure Lifestyle and Disabled Individuals. Paper presented at the Horizons West Therapeutic Recreation Symposium, San Francisco State University, San Francisco, CA.
- Shilts, R. (1988). And the Band Played On: Politics, People, and the AIDS Epidemic. New York: St. Martin's Press.
- Siano, N. (1993). No Time to Wait: A Complete Guide to Treating Managing, and Living with HIV Infection. New York: Bantam Books.
- Stumbo, N. J., & Thompson, S. R. (1986). Leisure Education: A Manual of Activities and Resources. Pennsylvania: benture.
- Tennessee Department of Health. (1992). Testing HIV Positive: What You Should Know. Authorization No. 343257.
- Tennessee Department of Health. (1993). AIDS: What You Should Know. Authorization No. 343121.
- Texas Department of Health. (1996). Texas AIDSLINE, 1-800-299-AIDS.
- The Student Bible. (copyright, 1986). Michigan: The Zondervan Corporation.
- Tuggle, M.S. (1995). Caring for Someone With AIDS. Conference materials: Nashville, TN.
- U. S. Department of Health and Human Services. (1994). Understanding HIV: Early HIV Infection Consumer Guide (AHCPR Publication No. 94-0574).
- Whetstone, M. L. (1995, June). Rae Lewis-Thorton: AIDS victim marries and faces life and death. Ebony, 50, 122(3).

APPENDICES

APPENDIX A

July 15, 1996

Dear Participant:

I would like to take this opportunity to invite you to participate in a study assessing the leisure and recreation needs of persons with AIDS and HIV positive individuals. I am a graduate student in therapeutic recreation at the University of Tennessee, Knoxville. I am presently in the midst of my internship in Beaumont, Texas, and this study is my thesis project, a part of the requirements for graduation.

This study utilizes the Leisure Diagnostic Battery Short Form Version B as it's instrument. The LDB entails one short scale covering a range of recreation and leisure participation questions. The results of this research can in turn be utilized as a basis for creating therapeutic recreation programs for the population under study through agencies which provide other services to persons with AIDS and HIV positive individuals.

The initial page attached to the assessment will take approximately one minute to complete. The LDB form itself is reported to take a participant approximately 10 minutes. Both the form and the initial page are to remain completely anonymous, so please do not write your name on either one, your anonymity is assured. Please read the instructions provided at the top of the LDB form before beginning the assessment. The assessment is provided free of charge and can be given to an agency employee, or mailed to the address below, upon completion:

Heather Hayes Terry, GRA
Thesis Research Project
P.O. Box 1313
Silsbee, Texas 77656

By mailing or giving the completed assessment form, you have anonymously consented to participate in this study. Participation in this study is completely voluntary. A copy of the combined results will be given to your agency and will be open for your viewing and comments.

Thank you for your consideration and I look forward to receiving your completed assessment by **August 31, 1996.**

Sincerely,

Heather Hayes Terry
Graduate Research Assistant

APPENDIX B

**BACKGROUND DATA SHEET
RECREATION AND LEISURE NEEDS STUDY**

Instructions: Answer the following questions truthfully. Remember that your identity is and will remain completely anonymous, even to the researcher. After completing this sheet, continue on to the Leisure Diagnostic Battery form.

1. Age of Participant: (circle one of the following)

0-15	16-20	21-25	26-30
31-35	36-40	41-45	45+

2. Gender of Participant: (circle one of the following)

Male

Female

3. Stage of HIV/AIDS of Participant:

HIV Asymptomatic (no visible signs of illness)

HIV Symptomatic (initial signs begin to appear, physical symptoms appear)

AIDS

APPENDIX C

PERCEIVED FREEDOM IN LEISURE SHORT FORM—VERSION B

Instructions: This survey deals with how you feel about your leisure experiences. These include participation in activities such as reading, hobbies, and crafts, social activities, music, sports, etc. Please read each of the following statements and circle the response that best reflects your feelings about each item.

	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
1. My recreation activities help me to feel important.	SA	A	N	D	SD
2. I know many recreation activities that are fun to do.	SA	A	N	D	SD
3. I can do things to improve the skills of the people I do recreation activity with.	SA	A	N	D	SD
4. I have the skills to do the recreation activities in which I want to participate.	SA	A	N	D	SD
5. Sometimes during a recreation activity there are short periods when the activity is going so well that I feel I can do almost anything.	SA	A	N	D	SD
6. It is easy for me to choose a recreation activity in which to participate.	SA	A	N	D	SD
7. I can do things during recreation activities that will make other people like me more.	SA	A	N	D	SD
8. My recreation activities enable me to get to know other people.	SA	A	N	D	SD
9. I can make a recreation activity as enjoyable as I want it to be.	SA	A	N	D	SD
10. I can do things during a recreation activity that will enable everyone to have more fun.	SA	A	N	D	SD
11. I usually decide with whom I do recreation activities.	SA	A	N	D	SD
12. I am good at the recreation activities I do with other people.	SA	A	N	D	SD
13. I am able to be creative during my recreation activities.	SA	A	N	D	SD

	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
14. I am good at almost all the activities I do.	SA	A	N	D	SD
15. I can enable other people to have fun during recreation activities.	SA	A	N	D	SD
16. During my recreation activities, there are often moments when I feel really involved in what I am doing.	SA	A	N	D	SD
17. I can usually persuade people to do recreation activities with me, even if they don't want to.	SA	A	N	D	SD
18. I can make almost any activity fun for me to do.	SA	A	N	D	SD
19. I participate in recreation activities which help me to make new friends.	SA	A	N	D	SD
20. I can make good things happen when I do recreation activities.	SA	A	N	D	SD
21. When participating in recreation activities, there are times when I really feel in control of what I am doing.	SA	A	N	D	SD
22. I can do things to make other people enjoy doing activities with me.	SA	A	N	D	SD
23. When I feel restless, I can do recreation activities that will help me calm down.	SA	A	N	D	SD
24. Sometimes when I do recreation activities, I get excited about what I'm doing.	SA	A	N	D	SD
25. I usually have a good time when I do recreation activities.	SA	A	N	D	SD

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VITA

Heather Hayes was born in Longview, Texas on March 4, 1971. She attended Texas Christian University in Fort Worth, Texas, where she received a Bachelor of Science degree in May, 1994, with a major in Language Studies.

During her college years at TCU, Heather worked as a counselor at Texas Lions Camp for Crippled Children for six summers. As a result of the time spent with the children at the camp, she became interested in the field of therapeutic recreation.

Upon graduation, she enrolled in the Master of Science in Recreation and Leisure Studies at the University of Tennessee in Knoxville, Tennessee after receiving a graduate assistantship under Dr. Gene Hayes. For the next two years, she worked on the TRACT grant and as treasurer, and later on, as program director, of Camp Koinonia. She also received an Outstanding Service award from the College of Human Ecology in the spring of 1996.

In December of 1995, while enrolled in her third semester of graduate school, she married Trevor S. Terry, a forest manager with Temple Inland in Silsbee, Texas, and long time friend of twelve years. After leaving Tennessee in May, 1996 to complete an internship, she has received a position as a therapeutic recreation specialist at Columbia Behavioral Health Center in Beaumont, Texas.

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