They are able who think they are able: An examination of the relationship between recreation therapy and selected psychological constructs.

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## **ABSTRACT**

CHERYL SPRADLIN: They are able who think they are able: An examination of the relationship between recreation therapy and selected psychological constructs.

(Under the direction of M. Deborah Bialeschki)

The purpose of this study was to examine the impact of a structured therapeutic recreation program on selected psychological constructs for African Americans that have had a stroke.

Using Bandura's social cognitive theory as a theoretical framework, the study utilized a mixed methods approach by establishing quantitative benchmarks for perceived self-efficacy, life satisfaction, and leisure attitude, followed by in-depth interviews to explore perceptions of study participants. Thirteen stroke survivors with a mean age of 55 participated in the study. The three themes that emerged during qualitative data analysis were leisure participation, social support, and coping/acceptance. The themes and concepts that emerged contributed to the development of a "common experience through group leisure" model that provided a visual representation of the means through which participants received benefits in

the program. Practical and theoretical implications and recommendations include examination of treatment in a group setting and outcome expectancy in therapeutic recreation.

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Go heels.

# TABLE OF CONTENTS

		Page
LIST	Γ OF TABLES	x
LIST	Γ OF FIGURES	xi
		Chapter
1	INTRODUCTION	1
	The Wellness Model	2
	Recreation Therapy and the Wellness Model	4
	Statement of the Purpose	5
	Significance of the Purpose	5
	Significance of the Study	6
	Definitions	6
	Delimitations and Limitations of the Study	8
	Research Questions	8
	Summary	9
2	2 LITERATURE REVIEW	11
	Introduction	11
	Stroke	11
	Theoretical Framework	14

	Bandura's Social Cognitive Theory14
	Self-efficacy16
	Life Satisfaction19
	Leisure22
	Leisure Attitude23
	Summary
3	METHODOLOGY AND DESIGN
	Introduction
	Paradigm and Method Choice25
	The Mixed Methods Design26
	Procedures
	The Club Rec Program29
	Sample Selection30
	Sample Profile31
	Instrument Selection and Design33
	Data Collection Process
	Treatment of Data36
	Researcher Role/Bias Management
	Summary
4	ANALYSIS AND INTERPRETATION
	Quantitative Data Analysis40
	Qualitative Data Analysis44
	The Meaning of Leisure44

	Social Support	46
	Friendships	47
	Family	50
	Nurturing	52
	Coping and Acceptance	54
	Physical Side Effects of Stroke	57
	Emotional and Psychological Side Effects of Stroke	58
	Productivity Side Effects of Stroke	61
	"Moving On"	64
	Leisure Participation	66
	Participation and Enjoyment	67
	Attitude and Motivation	69
	The Relationship between Social Support, Coping an Acceptance, and Leisure Participation	73
	Summary	73
5	CONCLUSION	75
	Conclusions	75
	Conclusion One: The Impact on Self-Efficacy	75
	Conclusion Two: The Impact on Life Satisfaction	78
	Conclusion Three: The Impact on Leisure Attitude	81
	Conclusion Four: Therapeutic Recreation, Social Support Networks, and Overall Well-Being	83
	Conclusion Five: A Common Experience through Leisure	84
	Implications and Recommendations for Future Research	88

Implications and Recommendations for Practice	90
Summary	92
APPENDIX A: Interview Guide	94
APPENDIX B: Consent Form	95
APPENDIX C: Life Satisfaction Scale	98
APPENDIX D: Leisure Attitude Measurement	99
APPENDIX E: Self-Efficacy Scale	101
References	103

# LIST OF TABLES

Table	
1. Descriptive Statistics – Selected Demographic Variables (N = 13)	32
2. Descriptive Statistics – Assessment Scores.	41

3. Spearman's Rho Non-Parametric Correlation Test Statistic (N=13).......42

# LIST OF FIGURES

Figure	
A. The Common Experience through Group Leisure Model	86

## CHAPTER ONE: INTRODUCTION

"They are able who think they are able" -- Virgil

As a growing portion of the population reaches age 50 or above and risk factors and behaviors for stroke become more prevalent, more adults are acquiring vascular brain injuries from a stroke each year. The United States Census Bureau (2000) estimates that the number of Americans age 55-64 will increase 73%, and the number of Americans age 65+ will increase by 54% between the years 2000-2020. The American Heart Association estimates that each year there are 700,000 new or recurrent strokes in the United States occur and there are 4.8 million stroke survivors with many having with permanent disabilities (American Heart Association, 2004). The combination of increased occurrence of stroke and the growing number of people with disabilities due to stroke demands the attention of the medical field.

The combination of old age, increased medical technology, lifestyle choices and sheer numbers of older Americans will result in more adult stroke survivors living in the United States than ever before. "On Jan. 1, 2011...boomers will start joining the ranks of senior citizens at the rate of 10,000 a day. In the meantime, a growing number of middle-aged boomers are gaining their first experience with what will be a long and intimate relationship with the country's health care system" (Carroll, 2003). The American medical community must be aware of the changes that will occur as the baby boomers age, and must be prepared for treating patients for much longer periods of time following a stroke. Improved short-term

survival after a stroke has resulted in a population of an estimated 4,800,000 stroke survivors in the United Stated. The majority of events in stroke survivors are recurrent strokes, at least for the first several years (Edlin & Golanty, 2006). The combination of an aging population and increased survival following a stroke will present the healthcare community with a population unlike any experienced before.

## The Wellness Model

The wellness model promotes health, well-being, and prevention of disease. The wellness model is "a shift from a medical model that favors treatment of disease, illness, and medical maladies to wellness, focusing on health, quality of life, and health promotion" (Shain, 1996). Use of a more holistic model of health promotes physical fitness and social connections (Henderson, Bialeschki, Hemingway, Hodges, Kivel, & Sessoms, 2001), and engages patients in activities that focus on general well-being rather than treatment of disease. Using the wellness model as a guide, therapeutic recreation specialists can design interventions that will not only increase quality of life, but also increase awareness of healthy behaviors that may prevent reoccurrence of disease. Given the inherent goals of the field, utilization of the wellness model in recreation therapy emerges as an appropriate method of practice. The philosophy of healthcare is evolving from a medical model to a model of health promotion, and the need to examine the treatment process holistically becomes necessary. Traditionally, the healthcare field has operated from the medical model; that is, a model focused on diagnosis of the problem and attention to the diagnosis only. A patient was treated as a diagnosis, with focus on the medical problem at hand. For example, a patient admitted with a diagnosis of stroke would be evaluated and treated only for the physical symptoms of stroke. Following assessment and treatment of the physical symptoms, patients

were discharged until another medical problem presented itself. A disadvantage of the medical model is that the mental state of the patient following a medical occurrence is not taken into account. Psychological stress can manifest itself in the form of physical symptoms, or exacerbate current physical symptoms. By not treating the psychological stresses of having a medical problem, the medical model serves to increase the possibility of illness or poor health.

In contrast to the traditional medical model, the World Health Organization (WHO) defines health as "a complete state of physical, mental, and social well-being and not merely the absence of disease or infirmity" (World Health Organization, 1948). Healthcare providers have discussed problems with the medical model, and the resulting reaction is the wellness model. The wellness model that the healthcare field is adopting today moves beyond that traditional notion of health and wellness as being the mere absence of disease to the optimal physical functioning of each individual regardless of current health level or disability (Drum, Krahn, Culley, & Hammond, 2005). When operating from the wellness model of health, the medical professional assesses and treats the patient from a holistic perspective. The holistic perspective examines the patient from not only a physical standpoint, but also psychological, emotional, spiritual, and social aspects. The argument behind the change to a wellness model is that treating the patient holistically will address the current health issue, but also will help prevent future development of heath problems. Development of an appropriate continuum of care in combination with wellness goals will result in higher quality of life for patients (Drum et al., 2005). Therefore, the importance of addressing the health and wellness needs of patients is quickly becoming a focus in the healthcare and medical fields.

## Recreation Therapy and the Wellness Model

As early as 2000 BC, the Egyptians documented the therapeutic effects of recreation in treating the sick (Mansfield, 2006). Although recreation therapy did not gain a formal title until the twentieth century, the goal of treatment using recreation activities has always been increased health and wellness of the patient. Due to the multifaceted nature of recreation therapy, I argue that recreation therapy has traditionally operated from the wellness model of health. Participation in recreation therapy often results in increased socialization opportunities and enjoyment in addition to physical and psychological benefits.

The field of recreation therapy has not always practiced from the traditional and widely accepted medical model, including traditional medical documentation, and the field has had some difficulty gaining influence and status within the medical field because of this. However, the recent shift toward a wellness model of health and health promotion is an opportunity for recreation therapists to become more involved in the continuum of care. The practice of focusing on the patient from a holistic perspective has afforded the profession a unique opportunity to become an inherent part of the treatment team. As the field of recreation therapy seeks to increase involvement and influence in a rehabilitative setting, the need to study theory-based methods consistent with the wellness model arises.

Health care organizations and the field of recreation therapy have called for treatment with an emphasis on functional outcomes and health promotion (Bullock & Mahon, 2001). While recreation therapy has modulated towards goals of well being and quality of life (Widmer & Ellis, 1997), the need for theory based research is also at the forefront of advancement of the field (Wise, 2002). Combining a wellness model with theory-based research provides the field of recreation therapy with justification for treatment,

rationalization for reimbursement, and increased opportunities for patients in rehabilitative settings.

## Statement of the Purpose

The wellness model is an established guiding model of service for recreation therapy, and quality of life is a key goal in recreation therapy, therefore, the need to research recreation therapy and quality of life constructs within a theoretical framework emerges. The purpose of this study was to explore the relationships between a structured recreation therapy program and self-efficacy, life satisfaction, and leisure attitude within the theoretical framework of social cognitive theory.

## Significance of the Problem

The increased prevalence of the wellness model indicates that therapy and treatment programs will move more towards treatment methods aimed at increasing quality of life from a holistic perspective. Recreation therapy is defined as "the purposive use of recreation/recreative experiences by qualified professionals to promote independent functioning and to enhance optimal health and well-being of people with illnesses and/or disabling conditions" (Bullock & Mahon, 2001, p. 125). The inherent element of quality of life within recreation therapy is congruent with wellness model based treatment. A disparity exists for theory-based research in the body of knowledge for recreation therapy. An examination of not only how, but also why recreation therapy influences psychological constructs that contribute to quality of life emerges. Self-efficacy, a construct within Bandura's social cognitive theory (Bandura, 1986) influences quality of life levels (Li, Harmer, McAuley, Fisher, Duncan, & Duncan, 2001) and was selected as a theory to examine within the context of leisure activity. Leisure attitude has also been shown to

positively impact quality of life levels (Lloyd & Auld, 2002), and was selected to examine the relationship between leisure involvement and perceptions of quality of life.

## Significance of the Study

Limited research exists addressing the use of recreation therapy in relation to self-efficacy and life satisfaction. This study contributed to the body of knowledge by testing a theory-based hypothesis and grounding design of the study on a well-known social psychology theory. The use of a mixed methods approach also adds to the contribution in that the approach is not widely used in recreation therapy. According to Henderson, Presley, & Bialeschki (2004), an examination of methods used in research found that only nine percent of the studies published in the therapeutic recreation journal from 1992-2002 utilized a mixed methods approach. An advantage to this standpoint is that "mixed methods can provide a stronger basis for uncovering a deeper understanding of the phenomena studied" (Henderson et al., 2004, p. 422). Although a valuable tool in leisure research, recreation therapists have not used the mixed methods approach frequently over the last fifteen years. This study used the approach to contribute to the body of knowledge in an effective although more infrequent fashion.

#### **Definitions**

For ease of understanding for both the reader and the study participants, the following definitions were used throughout the study:

<u>Self-Efficacy-</u> People's judgments of their capabilities to organize and execute courses of action required to attain designated types of performance. Self-efficacy was explained to study participants as "how you feel about your ability to accomplish a task or do something, and not how good you feel about yourself" (Appendix A).

<u>Life Satisfaction-</u> Perception of quality of life and satisfaction of life situation (burlingame & Blaschko, 2002).

Leisure Attitude- An individual's attitude toward leisure and leisure participation on the cognitive, behavioral, and affective levels. For example, the importance a person places on trying a new activity or making time to ensure leisure participation (burlingame & Blaschko). Recreation Therapy- In this study, recreation therapy will be individual and structured group recreation activities and interventions, developed from goals in physical, psychological, emotional, and social domains (Bullock & Mahon 2001). All therapeutic interventions were administered during the Club Rec program, therefore references to the Club Rec program should be interpreted as recreation therapy interventions and programs and vice versa for the purposes of the study. As there is a semantic debate within the field regarding the difference between recreation therapy and therapeutic recreation, the two terms will be used interchangeably and were used interchangeably during interviews with participants. CTRS- Certified Therapeutic Recreation Specialist. All recreation therapists at the Club Rec program are certified therapeutic recreation specialists, meeting the abilities and competencies set forth by the National Council for Therapeutic Recreation Certification (NCTRC) to "protect the consumer of therapeutic recreation services by promoting the provision of quality therapeutic recreation services by NCTRC certificants" (National Council for Therapeutic Recreation Certification, 2006).

<u>Cerebrovascular attack (CVA) -</u> A stroke. "A stroke occurs when a blood vessel that carries oxygen to the brain is either blocked by a clot or bursts. When that happens, part of the brain cannot get the blood (oxygen) it needs, and starts to die" (American Stroke Association website, 2006).

<u>Leisure-</u> The therapist did not define leisure for study participants. Within the context of the study and for purposes of analysis, the researcher considered leisure an activity that was freely chosen, intrinsically motivated, and provided enjoyment or happiness to the person participating.

## Delimitations and Limitations of the Study

Participants in the study group were delimited to African American adults over the age of 18 who had a stroke. The study was delimited to African Americans not as an attempt to examine the African American experience with stroke, but rather to eliminate race, ethnicity, or cross-cultural issues that may have arisen as an influential variable during data analysis. Another delimitation is that the study included only participants in the Sheltering Arms Club Rec program. A delimitation for the interview portion of the study included only participants who had speech and communication levels appropriate for a semi-structured interview.

The type of stroke and the resulting functional deficits was also a limitation, as strokes are highly individualized, and every stroke survivor's functional abilities will vary even if the stroke occurred in the same area of the brain. Another limitation included the frequency of participation in the program by the subjects; that is, study participants who attended the Club Rec Program only once a week received fewer opportunities for leisure participation than study participants who attended the Club Rec Program five times per week.

## **Research Questions**

During the course of this study, three main research questions influenced design and methodology. Bandura's social cognitive theory, connections found in the literature linking self-efficacy and life satisfaction; and support from the literature linking life satisfaction,

leisure participation, and leisure attitude were the foundation for development of the three research questions. The three research questions were designed to examine the perceptions of study participants concerning the selected psychological constructs that emerged from the theoretical framework:

- 1. What are study participants' perceptions of the Club Rec program and their perceived self-efficacy?
- 2. What are study participants' perceptions of the Club Rec program and their life satisfaction?
- 3. What are study participants' perceptions of the Club Rec program and their leisure attitude?

This research examined relationships between the three psychological constructs within the context of a therapeutic recreation program. The study examined differences in perceptions of self-efficacy, life satisfaction, and leisure attitude based on demographic variables such as gender, age, marital status, and education level.

## Summary

A growing proportion of Americans survive strokes every year (American Heart Association, 2004). Advances in the healthcare field allow more people to survive following a stroke resulting in a new population of people with disabilities (Carroll, 2003). During the advances in the field, a shift in mindset has occurred. The healthcare field has shifted from a medical model of health to a holistic and wellness-based model of health and treatment (Shain, 1996). Therapeutic recreation has historically been based on a wellness model of health, given the holistic mindset of the field. Although therapeutic recreation is in line with the wellness model of treatment within the healthcare field, therapeutic recreation falls

behind when examining justification for treatment and reimbursement through theory-based research (Wise, 2002).

The overarching goal of this study was to add to the body of knowledge by using a well-known theoretical framework and mixed methods approach. This study examined a holistic therapeutic recreation program with a population that included African American adults with strokes. Bandura's social cognitive theory provided a theoretical framework that influenced the design on the study. Connections in the literature between self-efficacy, a construct of social cognitive theory, life satisfaction, and leisure attitude guided development of the three research questions that examined relationships between the Club Rec program and the selected psychological constructs.

#### CHAPTER TWO: LITERATURE REVIEW

#### Introduction

Therapeutic recreation is a field that was founded on the assumption, and continues to assert, that therapeutic benefits are associated with recreation and leisure involvement (Bullock & Mahon, 2001). While many of these benefits seem obvious, a need still exists to utilize theory in the practice of recreation therapy (Farias-Tomaszewski, Jenkins, & Keller, 2001; Wise, 2002). Theory based practice lends validity to a field that has struggled because of a lack of cohesion surrounding the definition, lack of similar practices, lack of research demonstrating outcomes, and lack of a unifying philosophy in the field. Recreation therapy is a diverse field and can be utilized with many different populations in various settings. Therefore, the therapeutic benefits are sometimes not conveyed through general observation of practice. By using theory to guide practice, therapeutic recreation professionals can seek guidance to implement interventions or provide support for treatment plans (Wise, 2002). This chapter reviews the literature on stroke, and the literature used for the theoretical framework of social cognitive theory. Literature supporting the framework is also included from self-efficacy theory, life satisfaction, leisure, and leisure attitude. This chapter also links therapeutic recreation to the theoretical framework and topics presented.

#### Stroke

Although brain injuries are usually referenced as a traumatic event, a stroke is still considered an injury to the brain; and thinking of a stroke as a brain injury also promotes a

mindset regarding the life-altering power and seriousness of a stroke (Kaufman, 1988). The number of people with vascular brain injuries from stroke in the United States continually increases (American Heart Association, 2004; Bullock & Mahon, 2001; Wise, 2002). Although new medications such as tPA may help to reverse effects of ischemic strokes, or strokes caused by blood clots (American Accreditation HealthCare Commission, 2006), they must be used within the first three hours following the stroke, or the medication may do more harm than good. No cure exists for hemorrhagic (i.e., burst blood vessel) vascular brain injuries.

Risk behaviors contributing to stroke are prevalent in current society. The American Heart Association (2004) estimated that almost 23% of the population smokes, more than 50% do not achieve recommended levels of physical activity, and 67% of men and 57% of women are overweight or obese. With this combination of risk factors and behaviors, the likelihood of a cerebrovascular attack (CVA), commonly known as a stroke, has increased. Each year strokes kill 163,000 people, which makes it the third leading cause of death in the United States (American Heart Association, 2004). According to American Heart Association Statistics (2006), someone in the United States has a stroke every 45 seconds, and someone dies every three minutes from a stroke. The Centers for Disease Control and Prevention (2005) listed stroke as the leading cause of long-term disability in the United States. Among the portion of the population that incurred disabilities, 50% had some hemiparesis (i.e., one sided paralysis), 30% were unable to walk without a form of assistance, 26% were dependent in activities of daily living, 19% had aphasia (a speech disorder common to stroke), 35% had depressive symptoms, and 26% were institutionalized following their stroke (Kelly-Hayes, Beiser, Scaramucci, D'Agostino, & Wolf, 2003).

According to the American Heart Association (2004), compared with Caucasians, African Americans develop high blood pressure at an earlier age, and their average blood pressure is much higher. As a result, African Americans have a 1.5 times greater rate of heart disease deaths and a 1.8 times greater rate of fatal stroke.

Considering the increased prevalence of stroke, the larger numbers of Americans who survive strokes and the fact that almost 75% of the population is not institutionalized following their strokes, certain factors emerge to be examined. People who survive strokes return home either alone or to caregivers, and over one-third of the survivors experience depressive symptoms. Half of the Americans who survive their stroke lose physical functioning following their stroke. Regarding the phenomenon of stroke, Kaufman (1988) stated:

Though a stroke is a specific physiological event, the resulting impairments may be diverse and profound, involving physical, cognitive, sensory, emotional, and/or motor functions. Many aspects of a person's body, personality, and total sense of being can be, and frequently are, affected. In short, stroke is a condition in which many accepted boundaries must be reevaluated (p. 341).

Kaufman's assessment that stroke is more than a physiological event supports other research regarding the implications of stroke such as feelings of frustration or a desire to reestablish a sense of normality following their stroke (Conrad, 1985; Mills, 1994). The realization that stroke is not only a physiological event, but also one that impacts other psychological constructs is an example of the recent shift in thought in the healthcare field. Because of the permanent impacts of stroke such as loss of physical functioning and an increased need for assistance in behavioral and cognitive capacities (Bullock & Mahon, 2001), recreation therapy as a field should be keenly aware of the potential for provision of services in this population. Positive outcomes regarding the use of recreation therapy as an intervention in

the field of physical medicine include: improvement in physical health status, cognitive functioning, psychosocial health and well-being, and reduction in complications related to a secondary disability (American Heart Association, 2006). Utilizing therapeutic recreation as a treatment option for patients that have had a stroke improves sense of self, allows individual to achieve control over stress, enhances self-efficacy, prevents social isolation, develops/maintains social skills, enhances memory skills, improves organizational skills, and improves problem-solving (Coyle, Kinney, Riley, & Shank, 1991).

### Theoretical Framework

This section will discuss the theoretical framework that guided the design of the study. Bandura's social cognitive theory was the theoretical framework chosen. Self-efficacy theory, life satisfaction, and leisure attitude also contributed to the development of research questions within the chosen theoretical framework.

## Bandura's Social Cognitive Theory

Bandura's developed social cognitive theory to explain the cognitive, affective, and behavioral processing involved when individuals encounter specific situations (Maughan & Ellis, 1991). Bandura based social cognitive theory on human interaction models of behavior and offers a threefold approach to behavior. The three aspects of personal factors, environmental influences, and behavior influence each other to determine overall behavior.

According to Conn (1998), the "self regulation of behavior occurs through judgmental processes and through cognitive processing of self-observations" (p. 182). The judgmental processes include making comparisons with personal and external standards, attaching meaning or value to activities on an intrinsic level, and beliefs about personal

14

performance determinants (Bandura, 1991). For patients that have had a stroke, all three of the processes are factors in their rehabilitation.

Judgmental processes that determine overall behavior are exemplified within a patient in numerous ways. The first of the aspects of judgmental processes is personal and external standards. For example, patients hold themselves to personal standards regarding their progress in therapy, while therapists will also measure the patient's progress and actions against particular measures or assessments. Judgment of internal and external standards also contributes to the development of the third process of personal performance determinants as patients examine their own perceptions of their progress and their reaction to their assessment scores. The second aspect of judgmental processes is attaching meaning or value to activities on an intrinsic level. The process of attaching value or meaning to activities is especially congruent with participation in recreational therapy activities. The definition of leisure itself includes participation in an activity chosen freely and with high levels of intrinsic motivation.

Social cognitive theory is appropriate for examining behavior in a healthcare setting because it proposes the concept that cognitive processes are inherent to attaining particular behaviors (Bandura, 1977). All cognitive processes outlined by Bandura relate directly to effective treatment in a therapeutic recreation setting. A major component of the assessment and subsequent treatment plan includes psychological aspects of the patient's health, environmental resources available, and previous involvement in leisure activities.

Psychological aspects of health may include motivation, environmental factors include the opportunity for involvement and availability of resources, and behavioral factors may include previous successful attempts in the situation (Wise, 2002). When designing treatment plans

based in the theoretical framework of social cognitive theory, at least one of the factors should be a constant aspect of an effective treatment plan as therapists in a rehabilitative setting develop goals with the intent to achieve desired behaviors or outcomes. For therapists who develop treatments based on the theoretical framework of social cognitive theory, increased involvement in leisure activities can be an effective way to establish behaviors in congruence with the behavioral elements outlined by Bandura.

## Self-Efficacy

One theory that has been utilized successfully with people with disabilities and for health promotion is Bandura's self-efficacy theory (Conn, 1998; Fabian, 1991; Farias-Tomaszewski et al., 2001; Ferguson & Jones, 2001; Hampton, 2000; Herbert, 1998; Hughes, Nosek, Howland, Groff, & Mullen, 2003; Li et al., 2001; Purdie & McCrindle, 2002; Williams & Bond, 2002). Self-efficacy theory is a personal psychological construct of social cognitive theory, and generalizes across many situations (Bandura, 1989). Bandura (1989) also defined self-efficacy as "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performance" (p. 1176).

Self-efficacy theory relates to the larger theory of social cognitive theory on numerous levels regarding the judgmental processes described by Bandura (1991) that contribute to behavior. Self-efficacy theory demonstrates that individuals select activities in which they feel confident and avoid activities in which they do not, which is directly associated with the judgmental process of personal performance determinants within social cognitive theory. Self-efficacy governs efforts expended on activities and determines perseverance when confronted with obstacles (Pajares, 2002), which also connects self-efficacy to social cognitive theory through the judgmental process of attaching meaning and

motivation to an activity on an intrinsic level. The process of personal performance determinants is exemplified because people are more efficacious in situations where they can use existing strengths for success, and less efficacious in situations where they believe they possess certain personal weaknesses (Wise, 2002). In accordance with behavior as it relates to social cognitive theory and its judgmental processes, Wood and Bandura (1989) concluded that people who display high levels of self-efficacy are more likely to attempt challenging tasks, perform the tasks with success, and persist at such tasks longer.

A main goal of self-efficacy theory is to "increase motivation and skill development" (Kosma, Cardinal, & Rintala, p. 118). Researchers have examined self-efficacy in motivating individuals to be physically active (Kosma et al., 2002), promoting health for women with disabilities (Hughes et al., 2003), and performance and affect of wheelchair road racers (Martin, 2002). Because self-efficacy generalizes across many situations (Wise, 2002), increasing the use of the theory to increase motivation and skill development as part of recreation therapy treatment plans can be beneficial to the patient.

Examination of self-efficacy and social interaction is an appropriate application of the overarching framework of social cognitive theory because at its core, human interaction models of behavior are the basis of the theory. A means of examining human interaction include socialization opportunities within a therapeutic recreation setting. Socialization opportunities may provide vicarious experiences for people with disabilities within the context of developing self-efficacy (Bandura, 1986, 1997; Wise, 2002).

Wise (2002) discussed the use of a model in vicarious experiences during socialization during recreation participation. The model is the person that can be observed, and the person through which the vicarious experience can be achieved. Wise (2002) noted

that for the use of vicarious experiences in recreation therapy to be effective, the model should possess a characteristic or disability similar to the patient. In the case of the present study, the model could be someone else who had a stroke. When the observer witnesses a model achieving success, "observers think, 'if that person can do it then so can I' and their efficacy strengthens" (Wise, 2002, p. 341). The vicarious experience is one of the ways that therapeutic recreation specialists can contribute to the development of beliefs about personal performance, which is the third judgmental process of social cognitive theory.

When used within the context of social cognitive theory and self-efficacy theory to change or promote desired behaviors, the processes of developing personal and external standards and developing personal performance determinants are natural results of socialization in a leisure setting. Opportunities for socialization and vicarious experiences may be considered an external motivator (Tillotson & Smith, 1996) in the development of personal behavior. However, a lack of opportunity may negatively correlate with developing personal standards and performance determinants as Williams and Bond (2002) suggested. A lack of social support or involvement may lead to lower levels of self-efficacy for people with a disability or health condition.

Another aspect of self-efficacy directly linked to recovery for people with disabilities is outcome expectancy (Bandura, 1986, 1989; Conn, 1998; Williams & Bond, 2002; Wise, 2002). Outcome expectancy is the individual's belief that performing a behavior will yield specific consequences (Bandura, 1986). The concept of outcome expectancy is applicable to the rehabilitative process for people with disabilities or people that have had a stroke. The ability to conceptualize positive outcomes such as increased physical or cognitive functioning may increase self-efficacy levels for a person with a disability and result in

achievement of the positive outcome. Using self-efficacy in a healthcare setting has been shown to positively influence outcome expectancies (Anderson, Winnet, & Wojcik, 2001; Anderson, Winnet, Wojcik, & Bowden, 2001; Bandura, 1997, 1998; Conn, 1998; Dilorio, Dudley, Soet, Watkins, & Maibach, 2000), and "those who are efficacious tend to focus on the positive outcomes in a health and health promotion setting" (Wise, 2002, p. 337). Pajares (2002) stated that "self-efficacy beliefs touch virtually every aspect of people's lives whether they think productively, self-debilitatingly, pessimistically or optimistically; how well they motivate themselves and persevere in the face of adversities, and the life choices they make" (p. 4).

In examining the role that self-efficacy plays in recovery and life following a disability, the appropriateness of the theory in a therapeutic recreation setting emerges. Self-efficacy as a construct of social cognitive theory is an effective framework for the development of treatment plans in therapeutic recreation. The combination of opportunity for behavior modification, increased personal performance determinants, increased skill development and motivation, and achievement of positive outcome expectancies provide support for use of self-efficacy theory to guide therapeutic recreation interventions. *Life Satisfaction* 

Another construct that is related to social cognitive theory is life satisfaction. Larsson, G., Sjödén, O., Öberg, K., and von Esse, L. (1999) indicated that "social cognitive theory suggests that dissatisfaction with a particular ability will have a detrimental effect on psychological well-being" (p. 1321). Larsson et al. identified that life satisfaction for their study participants was influenced to the extent that the ability was viewed as important. The relationship of importance to the patient connects the judgmental process of attaching

meaning or value on an intrinsic level, as outlined by Bandura as an aspect of social cognitive theory.

Kosma et al. (2002) argued that self-efficacy could increase levels of motivation and positively influence attitude. By using self-efficacy as a framework to increase motivation and attitude, psychological well-being increases thereby influencing other factors such as motivation, attitude, and life satisfaction in a cyclical fashion. An individual that makes independent choices, exercises control, and perceives efficaciousness in their choices will have a higher level of quality of life (Janssen, 2004), and people with higher levels of self-efficacy have also been shown to have higher levels of life satisfaction (Hampton, 2000).

According to Day, Jankey, Alon, Clingbine, and Reznicek (1993) quality of life is a subjective condition that represents levels of life satisfaction. Renwick, Brown, and Raphael (1994) also stated that life satisfaction involves psychological and social aspects of a person's life, and when determining quality of life as it relates to life satisfaction, the health of the individual as defined by the World Health Organization (1948) should be considered.

The application of social cognitive theory as a determinant of behavior, and the resulting relationship between self-efficacy and life satisfaction can be applied in a leisure setting. Iso-Ahola (1980) stated that a significant body of research suggests that leisure satisfaction is a significant contributor to perceived happiness, life satisfaction, and quality of life when leisure satisfaction relates to perceptions of efficaciousness regarding the activity. Fine (1996) also asserted, "satisfactory and appreciated lifelong leisure that becomes part of healthy lifestyles can enhance the quality of life" (p. 347) for people with disabilities. This statement supports the judgmental process of attaching meaning or value to activities on an internal (appreciated) level within social cognitive theory. Ferrel (1989) held the view that

leisure can provide strong support for people with disabilities becoming integrated into their communities, increasing quality of life, and life satisfaction. This opportunity for integration supports the concept of socialization opportunities in conjunction with increased self-efficacy levels.

Fine (1994) also examined the notion of whether or not quality of life can even exist without leisure involvement. However, Gold (1989) noted that leisure is "more than just involvement, and leisure is about freedom, choices, growth, and motivation" (p. 380).

Within the context of the judgmental processes delineated by Bandura in his social cognitive theory, the existence of freedom, choices, growth, and motivation are the means by which leisure influences and increases life satisfaction. Fine (1996) concluded, "involvement with positive leisure experiences may not be the only panacea for exceptional living but its contribution represents a strong source for its quality and satisfaction levels" (p. 354).

The effectiveness of increasing self-efficacy as a means for improving other aspects of quality of life is noted by Hughes et al. (2003) in that "health promotion intervention programs involving cognitive measures, such as those intended to build self-efficacy are appropriate for individuals who demonstrate a readiness for health related lifestyle change" (p. 185). Health related lifestyle changes increase quality of life, and are often a goal of leisure participation and leisure education programs. The positive lifestyle changes are often included in the goal planning for many therapeutic recreation patients or participants. "Multiple methods of promoting self-efficacy in conjunction with social cognitive theory include modeling, guided action, and promoting meaningful outcomes" (Kosma, et al., 2002, p. 124), through which life satisfaction and quality of life issues are positively influenced.

Often when a person acquires a disabling condition (such as a CVA), sudden and drastic changes in physical functioning can lead to decreased levels of self-efficacy (Wise, 2002). Hampton (2000) reported that individuals with a disabling condition indicated that self-efficacy was a contributor to their quality of life. Self-efficacy can influence resilience in adverse situations such as the decreased physical functioning that results from a stroke (Pajares, 2002), thereby influencing life satisfaction. Increased perceptions of self-efficacy influence psychological well being and can also improve physical functioning in people with disabilities (Li et al., 2001).

## Leisure

The definition of leisure is one that has been debated since the time of the ancient Greeks (Snir & Harpaz, 2002). The highly individualized nature of the intrinsic value and enjoyment that is achieved through leisure participation makes the process of defining leisure for all a difficult task. "Though various definitions of leisure have been proposed, authors have most commonly described the concept of perceived freedom and intrinsic motivation as being central to the notion of leisure" (Bullock & Mahon, 2001, p. 125). Henderson et al. (2001) also described determining a definition of leisure as difficult due to varied approaches to leisure, such as "time, activity, and state of mind" (p. 15). One aspect of leisure that has been determined and agreed upon is that leisure has a positive impact on psychological well being, life satisfaction, and health (Snir & Harpaz, 2002).

Participation in leisure activities provides many benefits and can contribute to the overall well-being of an individual from numerous domains. Psychological benefits of leisure activities include feelings of mastery, pleasure, and increased quality of life (Fine, 1996). Leisure participation also provides physical benefits such as weight loss or decreased

blood pressure levels (Anspaugh, Hunter, & Dignan, 1996) and opportunities for social connections (Henderson et al., 2001). Individuals with disabilities are often at a heightened need for the benefits achieved from leisure participation. The benefits of "self-determination, normalization, social role valorization, inclusion, and advocacy" (Bullock & Mahon, p. 126) are all positive leisure participation outcomes for people with disabilities.

Although there is no definitive definition of leisure, the benefits of recreation participation are apparent to those individuals who participate (Fine, 1996). Participation in leisure activities provides a method for examining the theoretical framework of social cognitive theory and its underlying judgmental processes, self-efficacy and the concepts of motivation and outcome expectancies, and the relationship that leisure participation has with life satisfaction.

#### Leisure Attitude

To achieve the benefits of leisure participation, a person must have a positive attitude toward leisure and recreation involvement. Otherwise, participation will be limited or non-existent and benefits will not be achieved. Limited research exists based on leisure attitude and stroke survivors. Of the research within the body of knowledge, leisure attitude is an indicator of quality of life, and people who exhibit positive leisure attitudes are more satisfied with the benefits they derive from leisure and are more likely to participate in leisure activities (Lloyd & Auld, 2002).

Negotiation of constraints may also influence leisure attitude. Constraints such as decreased skill level or lack of exposure to opportunities may also relate to leisure attitude (Henderson et al., 2001). Perception of inability in an activity may promote a negative attitude toward participation in the activity. Decreased functional ability due to a stroke may

also be associated with lower leisure attitude and self-efficacy levels. Decreased functional ability may contribute to lower beliefs regarding performance determinants, which is a concept within Bandura's social cognitive theory. Reduced levels regarding personal performance determinants may negatively influence perceived self-efficacy, thereby influencing leisure attitude and decreasing participation levels. Decreased participation levels lower the number of opportunities to receive benefits of leisure involvement, thus decreasing quality of life. Therefore, associations between leisure attitude, social cognitive theory, self-efficacy, and quality of life should be examined as complements to a holistic model of treatment within therapeutic recreation.

## Summary

In the field of recreation, researchers have used social cognitive theory and the construct of self-efficacy as a guide for practice (Herbert, 1998; Wise, 2002), the role of recreation on levels of life satisfaction (Fabian, 1991; Siegenthaler, 1997; Smith, 1993), and the role of recreation on levels of motivation and attitude (Hughes et al., 2003; Li et al., 2001; Lustig, Rosenthal, Strauser, & Haynes, 2000). However, little research exists in the body of knowledge on connecting or examining relationships between the three psychological constructs. The purpose of this study was to examine if there are relationships between recreation therapy participation and self-efficacy, life satisfaction, and leisure attitude. The use of social cognitive theory and self-efficacy, one of the psychological constructs of social cognitive theory, provided a theoretical framework and served to increase justification for recreation therapy as a treatment option for healthcare professionals working from a wellness model.

## CHAPTER THREE: METHODOLOGY AND DESIGN

#### Introduction

The section explains the methodology and design of the study. Paradigm, method choice, selection of sample, data collection, instruments used, treatment of data, and researcher role/bias are addressed in this chapter.

## Paradigm and Method Choice

I operated from the positivist paradigm for this research study. Positivism is the idea that society can be studied from a scientific theoretical perspective and can be explained by rational thought and logic (Babbie, 2004). Historically, the positivist paradigm has guided scientific research because it seeks concrete evidence and rational explanation. (Malkin & Howe, 1993). Using quantitative data provided the opportunity to run statistical procedures to prove or disprove the theory based research questions. Proven statistical formulas allowed the researcher to state definitively the answer to the research questions with statistical and scientific support. The opportunity to state the significance of results using established and widely used formulas also added validity and/or reliability to conclusions of the research.

The positivist researcher used a deductive standpoint in connection with a preestablished theory to develop the study, methods, and analysis to test the selected theory (Malkin & Howe, 1993). The positivist researcher selects a theory and seeks to predict results based on application of the theory in the study setting. In this study, selfefficacy was the theoretical framework used to design the research questions. Operating from a positivist paradigm, I sought to understand the true reality of a situation and seek scientific explanation for the phenomenon. Due to the logical and straightforward nature of the data, I felt that quantitative data collection and analysis would be congruent with the chosen paradigm.

Following selection of my guiding paradigm, I made a prediction based on Bandura's self-efficacy theory and utilized that theory as a guide for development of the study design. I tested three research questions based on self-efficacy theory as a construct of social cognitive theory. The three research questions examined participants' perceptions of the Club Rec program and their 1) self-efficacy, 2) life satisfaction, and 3) leisure attitude. Using instruments selected to examine the research questions, I gained measurable results that established quantitative benchmarks for the study participants. Quantitative data analysis included descriptive statistics and correlations. Collecting quantitative data established a benchmark for assessment scores, and the scores provided a numeric picture of self-efficacy, life satisfaction, and leisure attitude for the study participants. The scores were further examined by collecting qualitative data.

# The Mixed Methods Design

When designing the methodology of the present study, I determined the most beneficial approach would be a mixed methods design that included establishment of a quantitative benchmark followed by collection of qualitative data through observation and indepth interviews to explain and examine the quantitative results. Using in-depth interviews and field notes allowed the opportunity to collect data that provided additional insight not available through statistical procedures alone. Previous research in my graduate coursework

had established that study participants should have generally high scores on the instruments administered (Spradlin, 2004), and I wanted to know why the levels were high, not only that they were.

Following quantitative analysis, I collected qualitative interview data to further explain and examine the results from the quantitative portion of the study. The qualitative portion of the study served to explain the scores and differences. I chose to use qualitative methods to provide a deeper understanding of the numeric benchmarks set in the first phase of the study, thereby increasing understanding of the experiences and perceptions of the study participants. The results of statistical analyses will be discussed in-depth in chapter four along with the qualitative data that provided insights into the interpretation of the qualitative data.

Because of the social aspect of the Club Rec program and the individualized nature of a stroke, in-depth interviews presented as an appropriate from which to design the second portion of the study. My purpose in choosing a qualitative portion for the second part of the study was to examine the realities, participation, and perceptions of the study participants in the Club Rec program who were living with a stroke.

The purpose of the qualitative portion of this study was to examine the experiences of participants who were attending the Club Rec program. In this study, the data being examined were the realities and experiences of Club Rec participants who had a stroke. Indepth interviewing allowed me to develop a rapport with the participants and probe if clarification or more details were needed. In-depth interviews allowed me to ask questions regarding the feelings and emotional reactions of study participants as well as what had led to the development of their feelings, rather than just reporting that a certain emotion was

expressed. The benefits of being able to describe the evolution of particular mindsets or attitudes regarding experiences with recreation and leisure increased my understanding and interpretation of the data.

All participants had a unique perspective on the Club Rec program and the benefits they received while attending because of the individualized nature of their stroke. The qualitative data allowed me to articulate the similarities and differences between the experiences of the participants beyond just what the numbers suggested. I was also able to gain greater understanding of what participants perceived as gains through regular attendance of the program.

The qualitative interview data provided insight into the feelings of the study participants that may not have been apparent or available solely with the use of surveys.

Using interviews in this study allowed me to understand my quantitative results better and articulate how recreation therapy influenced participants' mindsets and recreational experiences following a stroke.

An important reason why I chose to use a mixed methods design was to recognize the experiential aspect of the study (Malkin and Howe, 1993). I used in-depth interviews, because I wanted to understand the significance of the conscious experience from the subjective or first person point of view (Smith, 2005) for study participants in the Club Rec program. Using in-depth interviews allowed Club Rec participants to explain their actual experiences from their personal perspectives. For example, as participants continued to attend the Club Rec program, their daily experiences changed, so meaning and mindset changed every day as a result of interaction with others, activities, and the observation of

other participants around them. Many of the study participants identified talking about their experience during groups as a way to come to terms with having a stroke.

Utilizing a mixed methods approach can be beneficial to provide more complete understanding of data collected (Henderson, Ainsworth, Stolarzcyk, Hootman, & Levin, 1999). Providing quantitative support for theory combined with substantiation for and expansion of findings from qualitative data, allowed for a more comprehensive examination of results. This study also attempted to illustrate an encapsulated approach to linking quantitative and qualitative data by embedding interviews within a quantitative study, therefore promoting more expansive understanding (Henderson et al., 1999). I chose my specific methodology, because I believe the most effective way to fully examine the experiences of study participants was to combine quantitative and qualitative data to provide a comprehensive examination of the relationship between recreation therapy and African Americans who experienced strokes.

#### **Procedures**

## The Club Rec Program

All study participants were enrolled in the Sheltering Arms Club Rec program. The Club Rec program is a holistic day recreation program for adults with disabilities; 70% of program participants have had a stroke, 27% of program participants have had a traumatic brain injury, and 3% of program participants have another physical condition such as neuropathy or fibromyalgia. According to Austin (1991), recreation therapists "assist the client to meet a problem or need... [and] the practitioner bases his or her service on processes and techniques" (p. 2) drawn from a base of knowledge and theory. The recreation therapists at the Club Rec program addressed the varying needs of participants through

personal goal planning and follow up, and by designing interventions or activities that were specific to the primary diagnoses of Club Rec participants.

Trained and certified recreational therapists planned and facilitated all activities at the Club Rec program. The program is offered five days per week from 7:30am – 5:30pm, with structured programs offered from 9:00am -3:00pm, located in one building where all services except community re-entry outings are facilitated. Structured activities vary and include spirituality groups, craft activities, a coping group with the social worker on staff, community re-entry outings, language and cognition groups, special events such as an accessible cruise or therapeutic horseback riding, and a variety of other structured group activities.

Activities chosen for the Club Rec program have therapeutic value, and no activity was planned without a therapist being able to ascertain therapeutic value in the pursuit. Some activities were chosen for obvious benefit, such as a seated range of motion exercise group that served to improve fitness levels. Other activities such as a board game appeared to be diversionary in nature, but provided for improvement in the areas of cognitive processing, fine motor control, or appropriate social interactions. Other activities were designed to address emotional needs of participants; for example, activities such as the spirituality group or the Breakfast Club were designed to develop social networks among the participants, the coping group was designed as a means for expressing feelings and discussion of life issues, and all activities were planned with the intent of increasing leisure participation.

### Sample Selection

Following approval from the Academic Affairs Institutional Review Board, participants were recruited from the Sheltering Arms Club Rec program where I was a therapist. I approached eligible participants discussed the study verbally with them.

Discussion included expectations during the study, what would occur during the study, confidentiality, and treatment of the data materials. Special care was taken to ensure that the participants did not feel they were required to participate or that the services they received as Club Rec participants would be changed or diminished for their involvement or refusal to participate in the study. Following agreement to participate, all appropriate forms including consent forms (Appendix B) were reviewed and signed. The researcher kept all forms in a locked cabinet at the researcher's office.

Participants were selected based on the following criterion: participant in Sheltering Arms Club Rec program, primary diagnosis Cerebrovascular Attack (CVA), over 18 years of age, self-identified willingness to participate in study, African American ethnic background, and agreement to and signing of a consent form. I chose African Americans as an ethnic group for my research for several reasons. The first reason I chose to concentrate is because of the lack of research with this population (Lavizzo-Mourney & Knickman, 2003). The majority of research over the last fifty years has concentrated on Caucasian males (Fiscella, Franks, Gold, & Clancy, 2000), and a disparity in research with the African American population has emerged. Also, by delimiting the study to African Americans, cross-cultural variables would not influence results. Disparities in research combined with a desire to negate the influence of differing cultures on the results influenced my decision to focus on this ethnic group.

## Sample Profile

Thirteen Club Rec members agreed to participate in the study. The thirteen were 85% of all Club Rec participants that I identified as eligible to be included in the study. Participants were selected using the convenience selection process, as the researcher was a

therapist at the hospital and had regular access to participants for the purposes of conducting assessments, interviews, and making daily observations and taking field notes. Thirteen participants completed the quantitative portion of the study, and ten of these participants also completed the interview portion of the study. The interview process ended when theoretical saturation was achieved. According to Auerback (2005), theoretical saturation is met when information received from participants confirms information already received from earlier participants or begins to confirm revised or constructed theories from the research. A demographic profile of the study participants is included in table 1.

Descriptive Statistics – Selected Demographic Variables (N = 13)

Variable	n	Minimum	Maximum	Mean
Gender				
Female	10	-	-	-
Male	3	-	-	-
Age		42.00	86.00	55.62
Time since onset (years)		0.25	6.00	1.96
Time in program (years)		0.10	5.00	1.57
Marital Status				
Single	4	-	-	-
Married	3	-	-	-
Divorced	5	-	-	-
Widowed	1	-	-	-

**Education Level** 

Table 1

Did not complete high school	5	-	-	-
Completed high school	4	-	-	-
Some college	3	-	-	-
College degree	1	-	-	-

All participants were African Americans who were stroke survivors, and all were participants in the Club Rec program at Sheltering Arms Physical Rehabilitation Centers. Ten participants were women, and three participants were men. The number of men available for the study was lower than the number of women because a higher percentage of men in the program had a significant language barrier from their stroke or did not meet selection criteria. The mean age was 55.6 years, with a median of 54.0 and a range of 42 to 86. Four participants were single and had never been married, three participants were married, five participants were divorced, and one participant was widowed. Participant time since onset of stroke varied from three months to six years with a mean time since onset of one year eleven months. Participant time in the program ranged from one month to five years with a mean time in program of one year seven months. Education levels varied from grade school to college completion. Five of the participants had not completed high school, four participants had high school diplomas, three participants had completed some college, and one participant had a college degree. All participants except for the participant who was retired at the time of her stroke reported being employed full time at the time of their stroke. Some participants reported working multiple jobs at the time of their stroke.

### *Instrument Selection and Design*

The theory chosen to frame this research was self-efficacy, which is part of a larger theory known as social cognitive theory. Surveys were used to collect quantitative data from study participants in one sitting. The instruments selected were the Life Satisfaction Scale (Lohman, 1976), the Leisure Attitude Measurement (Beard & Ragheb, 1991), and the Self-Efficacy Scale (Sherer, Maddux, Mercandante, Prentice-Dunn, Jacobs, & Rogers, 1982). These three instruments were used in combination to effectively address all of the research questions.

The life satisfaction scale (Appendix C) measured five dimensions of satisfaction: pleasure vs. apathy, determination, desired and achieved goals, mood, and self-concept. The scale was rated by an agree/disagree format on 32 statements. A sample question was "my life could be happier than it is right now". An expert panel assembled at West Virginia University examined the scale, and concluded that the instrument had content validity. Content validity measured how well the items in an assessment represented the overall domain the scale intended to measure (Zabriskie, 2003). As applied to this assessment, content validity meant that the items in the scale were representative of numerous domains regarding quality of life and not just quality of life as related to one specific area. The scale also had a reliability coefficient of .92 following past-hoc examination (Odell, Soloninka, Lawrence, & Gartin, 1992).

The leisure attitude measurement (Appendix D) assessed participants' attitude toward leisure on cognitive, affective, and behavioral levels. The instrument used a 1-5 Likert type scale: 1 = never true, 2 = seldom true, 3 = somewhat true, 4 = often true, and 5 = always true. A sample statement was "Engaging in leisure activities is a wise use of my time". General test-retest reliability of the leisure attitude measurement is .94. Reliability scores related to

the three levels measured are cognitive = .91, affective = .93, and behavioral = .89 (burlingame & Blaschko, 2002).

The self-efficacy scale (Appendix E) measured general expectations of self-efficacy. The self-efficacy scale had 20 questions and used the same Likert type scale as the leisure attitude measurement. A sample question was I do not seem capable of dealing with most problems that come up in my life. The test has a reported alpha of .86 and demonstrated both criterion related and construct validity. Criterion related validity concerns an observed relationship with some other criterion, and it can also be referred to as predictive validity (Zabriskie, 2003). The criterion related validity of the self-efficacy scale offered that scores on the assessment would be positively correlated to other measurements of self-efficacy. Construct validity concerned how well the scores from the scale correlate with scores from another theoretical construct (Zabriskie, 2003). Applied to this study, construct validity indicated that someone with high scores on their self-efficacy assessment should also have high levels of life satisfaction, since there is a positive theoretical relationship between self-efficacy and life satisfaction (Haley, LaMonde, Han, Burton, & Shonwetter, 2003).

Additional demographic data such as gender, age, education level, former occupation, and marital status were obtained from each study participant's medical chart that was available to the researcher. The researcher also collected data regarding the length of time since the stroke occurred, and the length of time that the participant had been in the program.

Semi-structured interviews were used for the qualitative portion of the study (Appendix A). Sample questions included: "What do you like/dislike about the Club Rec Program?", "Discuss why you continue to attend the Club Rec Program", "Have you made friends at the Club Rec Program?", and "How has the Club Rec Program changed how you

feel about yourself?". Study participants were allowed to expand on their answers, and the researcher probed participant for more information if appropriate. During the interviews, the participants were also asked about their stroke, when it occurred, the circumstances regarding health and risk factors before their stroke, and feelings following the stroke. Interviews were ended when the researcher felt all information required had been collected. Participants were offered the opportunity to add any thoughts following the interview.

The researcher administered the instruments. Rationale for administration by the researcher was to account for any language or reading problems participants might have had because of their stroke, and to ensure reliability and consistency in administration method.

### Data Collection Process

Each participant in the quantitative portion of the study was assigned a number by the researcher to assure confidentiality in the study. A master list of the participants and the assigned numbers and pseudonyms were kept in a locked cabinet by the researcher. All three instruments were administered at the same time and in the same order. Quantitative data collection occurred from September 2004 to November 2004. The interviews occurred from the period of January 2005 to September 2005, and were held in a staff office at the Club Rec program. I made attempts to have the interviews in the same office and attempted to minimize interruptions during interviews or data collection. Participants in the qualitative portion of the study were assigned a pseudonym to assure confidentiality, and tapes and transcriptions were kept in the locked cabinet. The tape recorder was placed on the desk to the side of the desk to minimize conspicuousness.

### Treatment of Data

The data from the assessments were hand scored by the researcher, and data was entered into Statistical Package for the Social Sciences (SPSS) by the researcher. Data entered in SPSS was by assigned number. Therefore, no names were used at any time in data entry. The dependent variables were the scores and sub-scores on the assessments, and the independent variables were time spent in structured recreation as well as selected demographics.

Statistical tests used included basic descriptive statistics and the non-parametric test statistic Spearman's Rho. The Spearman was used because of the small number of participants in the study. According to Ware (2003), small numbers of observations cannot be used to invoke the central limit theorem and non-parametric statistics must be utilized. Non-parametric statistics account for small numbers of observations and do not assume a normal population. Spearman's Rho is a measure of the linear relationship between two variables and is the non-parametric equivalent of Pearson's r.

During the qualitative portion of the study participant observations, a field note journal, and in-depth interviews were used. Interviews were transcribed verbatim and then provided to the participants for a member check to ensure accuracy and to allow participants to make changes if desired. Following transcription and member checks, I read and re-read the interviews and made notes in the margins regarding my thoughts or impressions.

Thoughts or ideas that were consistently expressed by participants became codes such as "family", "motivation", "frustration", "anger", "fun", "participation", or "coping". Analysis of codes resulted in connections among the data that became emerging themes within the interviews. Following emergence of themes, I began to reexamine the literature and sought new literature in which to ground the data. The grounded theory that emerged related social

support networks and their relationships to recreation therapy. These insights from social support networks theory will be discussed in-depth in chapter four and five.

## Researcher Role/Bias Management

Due to the nature of the relationship that I had with many of the participants, special efforts were made during the data collection process to maintain both a trusting and professional relationship. Participants were encouraged to be open and honest, and the established relationship appeared to put study participants at ease when talking about a difficult time in their lives. The pre-established relationship with study participants allowed me to connect on a personal level, and I believe the participants felt more comfortable opening up about their experiences. I also took special care to encourage the participants to tell me their true feelings, rather than what they thought that I wanted to hear or benefited me. I do not feel that any of the participants fabricated or embellished their experiences or their views towards the Sheltering Arms Club Recreation Program.

## Summary

The purpose of this research was to examine the relationship between recreation therapy and the life satisfaction, self-efficacy, and leisure attitudes of African Americans who were stroke survivors. Bandura's self-efficacy theory, a construct of social cognitive theory, was the guiding theoretical framework for the quantitative portion of the study. The qualitative portion of the study focused on the experiences of participants in the Club Rec program at Sheltering Arms Physical Rehabilitation Centers, and the perceived benefits from participation in a structured recreation therapy program following a stroke.

#### CHAPTER FOUR: ANALYSIS AND INTERPRETATION

The purpose of this study was to explore the relationship between recreation therapy and selected psychological constructs for African Americans that had a stroke. The three questions that guided the study were 1. What are study participants' perceptions of the Club Rec program and their perceived self-efficacy? 2. What are study participants' perceptions of the Club Rec program and their life satisfaction? 3. What are study participants' perceptions of the Club Rec program and their leisure attitude?

A mixed methods approach was used in this study. The purpose of using a mixed methods approach was to establish quantitative baseline levels for self-efficacy, life satisfaction, and leisure attitude. This approach was followed by an analysis of differences based on variables such as age, gender, time since onset, and time spent receiving recreation therapy. The qualitative portion of the study examined potential explanations for variances in levels in the study group and explained the overall experiences of the study participants in relation to their stroke and their involvement with recreation therapy.

Survey tools for self-efficacy, life satisfaction, and leisure attitude provided quantitative benchmark data, while in-depth interviews and field notes provided qualitative data for the study. The combination of the two methods provided a mechanism for a richer understanding of the research questions. An established rapport with study participants also contributed to creating a discourse that was conducive to truthful and candid data.

Self-efficacy, a construct of Bandura's social cognitive theory, provided the theoretical framework for the study. According to Pajares (2002), empirical evidence supports the belief that self-efficacy impacts almost every aspect of a person's life, including the ability to think optimistically or pessimistically and persevere in the face of adversity. Having a stroke can be identified as an adverse situation. Therefore, self-efficacy was deemed an appropriate framework for the study.

## Quantitative Data Analysis

Quantitative data analysis occurred following completion of the assessments by study participants. I scored the assessments, and the scores were entered into the Statistical Package for the Social Sciences (SPSS) 11.0.0 program. Study participants were assigned an identification number that was used to identify them in the SPSS program. Overall scores for each instrument as well as scores for applicable subscales were entered. Demographic factors including gender, age, time since onset of stroke, time in Club Rec program, marital status, and education level were also entered as variables in the SPSS program.

Following data entry, the data were analyzed for correlations between scores, descriptive statistics, and variables. The non-parametric statistic Spearman's Rho was used because the central limit theorem cannot be assumed with a sample size of 13. Spearman's Rho is considered as the regular Pearson's correlation coefficient in terms of the proportion of variability accounted for. That is, the test measures the relationship between the two variables; however, because the test is non-parametric it uses the rank order rather than the actual variables. Overall assessment scores are found in Table 2, and the results of Spearman's Rho non-parametric correlation statistic can be found in Table 3.

Table 2

Descriptive Statistics – Assessment Scores (N= 13)

Variable	Minimum	Maximum	Mean	S.D.
Total self-efficacy	73.0	108.0	92.7	8.6
General self-efficacy	53.0	81.0	68.1	7.6
Social self-efficacy	20.0	29.0	25.2	2.4
Total leisure attitude	3.29	4.78	4.37	0.41
Cognitive leisure attitude	4.00	5.00	4.54	0.37
Affective leisure attitude	3.92	5.00	4.70	0.31
Behavioral leisure attitude	3.42	4.42	4.10	0.33
Life satisfaction	16.0	25.0	21.5	3.8

The self-efficacy assessment had a minimum score of 23 and a maximum score of 115. The mean total self-efficacy score was 92.7; the general self-efficacy minimum score was 17 and the maximum score was 85; and the mean of general self-efficacy was 68.1. The minimum social self-efficacy score was 6 and the maximum score was 30, and the mean score was 25.2. The minimum score for the leisure attitude measurement and its subscales was one and the maximum score on all of the scales was five. The means for the leisure attitude measurement and subscales were all above four. The minimum score for the life satisfaction scale was zero and the maximum was 31, and the mean life satisfaction score was 21.5.

Table 3 Spearman's Rho Non-Parametric Correlation Test Statistic (N = 13)

	Time since Onset	Time in Program
Time Since Onset	-	.896**
Time in Program	.896**	-
Total Self Efficacy	.373	.291
General Self Efficacy	.408	.430
Social Self Efficacy	.121	082
Leisure Attitude	.050	127
Cognitive Attitude	.391	.182
Affective Attitude	140	188
Behavioral Attitude	253	293
Life Satisfaction	.132	.279

<sup>\*</sup>p < .05., \*\*p < .01.

Following analysis of the quantitative data, I found all of the scores to be high as indicated by the scoring interpretations included with the assessments. Analysis of non-parametric correlations between time since onset and time in program with variables

indicated limited significant relationships. Time since onset of stroke and time in the Club Rec program had a positive correlation statistic of .896 at the p < .01 level. The positive relationship infers that study participants either joined the Club Rec program shortly after their stroke, stayed in the Club Rec program following joining, or a combination of the two variables. Total self-efficacy was positively correlated with general self-efficacy at the p < .01 level and social self-efficacy at the p < .05 level. However, these results only indicated that as total self-efficacy scores increased, so did scores of the subscale, which should be expected in an assessment that demonstrates criterion validity. Similar results were obtained with the leisure attitude measurement as a positive relationship was indicated with the subscales of cognitive leisure attitude and affective leisure attitude at the p < .01 level. The limited significant correlations provided a foundation for further examination through qualitative analysis.

Overall, quantitative data yielded limited significant results for examination of the research questions. Few, if any, conclusions can be drawn solely from the quantitative data analysis results; however, qualitative data was also collected to offer a more complete examination of the research questions. Qualitative data collection through observation and in-depth interviews provided insight from study participants as to why they had elevated levels of self-efficacy, leisure attitude, and life satisfaction. Qualitative data also examined if involvement in the Club Rec program had an influence on increased levels of the three constructs. Qualitative data collection emerged as a more effective means by which I could answer my initial research questions. Therefore, with the quantitative results as a benchmark, I designed my interview guide to explain quantitative assessment results and better answer my initial research questions.

### Qualitative Data Analysis

Throughout the qualitative data analysis process, three themes emerged relating to participation in a recreation therapy program following a stroke. The first theme was the development of social networks. This theme examined the importance of building friendships and developing a social support network of fellow stroke survivors in overcoming stroke. The second theme focused on coping and acceptance. The coping and acceptance theme explained the negotiation of side effects of a stroke on numerous levels and included the process of "moving on" following a stroke. The final theme that emerged during analysis was leisure participation. The leisure participation theme was closely connected to the other two themes, and could potentially be a sub theme of the social networks and coping and acceptance themes. However, leisure participation was treated as a separate theme, because recreation participation was classified as a means to an end that directly influenced the other two themes rather than the result of building a social network or coping.

## The Meaning of Leisure

All of the participants had different ideas of what leisure was and is for them. This section provides a background on participant perceptions of what leisure had meant to them in the past and how or if their perceptions had changed since beginning the Club Rec program. During the study and the interview, leisure was not defined for any of the study participants. For almost all of the study participants, leisure did not play a vital role in their lives prior to their stroke. As admitted by Neo, "I was working all the time. I didn't have no time for none of that stuff you have to do to take care of yourself, and boom I had the stroke". Participants worked long hours, multiple jobs, and generally did not classify recreation or leisure participation as an integral part of their pre-stroke lives. According to Linda:

So I just went to the job, day and night, and people don't want to come to work and managers, half of them are on drugs, disappearing and things. And so it leaves the weight on me. And I was working day and night, 16 [hours] sometimes, and I used to have fun at first, and then I just worked.

For a majority of the participants, consistent involvement in leisure activities began with their enrollment in the Club Recreation program offered as part of their recovery plan. Because many study participants lacked a healthy leisure lifestyle prior to their stroke, they did not know what to do with their time once discharged. Due to memory deficits or decreased physical functioning, some study participants were also unsafe to stay at home alone, or return to work and came to the Club Rec program instead. Carolyn made this point:

And he's [the physician] the one that decided that I need to come for the speech part and I think he told my husband that he didn't want me to be home by myself for awhile, about the depression part you know, and that's how I got here.

Other participants had made poor choices in their previous leisure experiences, as evidenced by this quote from Darryl: "A couple things I think, [as] I look back over, that could have caused the stroke... one thing was my use of drugs. That could have contributed to it." For Leroy, much of his leisure participation prior to his stroke had been focused on his son's participation and not his own as identified by this quote:

Well, one thing my son was in college and he played basketball, and I wanted to get back to watch him play. I didn't want to miss any of his games. I wanted to be able to walk into that gym by myself to watch my son play.

The opportunity to see his son play again provided Leroy with motivation for rehabilitation. According to Jensen's (1977) hierarchy of leisure, the third level of leisure time use is identified as "emotional involvement in another's performance" (p.12). Although not at the apex of Jensen's hierarchy, participation at this level was identified by Leroy as "something I like to do" and provided Leroy with motivation and incentive to work toward recovery.

As is evidenced by the previous quotes, "the concept of leisure is difficult to limit to a single definition. As an experience...the study of leisure has evolved into three basic approaches: time, activity, and state of mind" (Henderson et al., 2001, p. 15). Study participants had varied concepts and definitions of what leisure was and what leisure meant to them based on time, activity, or state of mind; for this reason, study participants were allowed to interpret the meaning of leisure as something individualized and unique to their own life experiences.

## Social Support

Social support has been connected to achieving positive outcomes during the recovery process following an illness (Shannon, 1997). Social support has been defined as support accessible to an individual through social bonds to other individuals, groups, and the community" (Lin, Simeone, Ensel, & Kuo, 1979). This definition is congruent with the first theme that emerged- social support. According to Taylor (2000), the elements of social support theory include emotional support (i.e. trust, empathy), informational support (i.e. teaching skills, problem resolution), psychological backing (i.e. encouragement), behavioral assistance (i.e. sharing of tasks), and positive social interaction. All of these elements of social support emerged within the theme and the sub themes. The social support theme emerged when the study participants discussed the benefits of being around other people that had also had a stroke as is evidenced by this quote from Leroy: "Club Rec lets you know that just because you had a stroke, that doesn't mean your world has ended, you still have a life." The perceived benefits appeared to contribute to the development of a sense of community and a social support network within the program.

Within the social support theme, three major sub themes developed. The sub themes were friendships, family, and nurturing. All study participants discussed making new friends while at the program, and how these friendships had fostered participation in activities and increased enjoyment while attending.

The sub theme of family was specifically noted by study participants. Family was explicitly mentioned as a concept that fostered a sense of connection and support separate from study participants' biological families. Participants identified the family sub theme as a close sense of connection and support from other Club Rec participants sharing the experience of stroke.

Nurturing developed as the third sub theme within the support network theme, and was related to the ethic of care within leisure. Care-giving had been a primary life role for all of the female study participants prior to their stroke. Development of a second family at the Club Rec program provided an opportunity to return to the comfortable and familiar role of nurturer for female participants. The three sub themes of friendships, family, and nurturing contributed to an overarching theme of social support in that all three provided for the promotion of relationships and social ties to a group of others sharing the experience of stroke recovery.

# Friendships

Development of relationships and social networks through leisure participation emerged as a mechanism that seemed to increase life satisfaction levels according to the participants. Past research suggested that leisure participation is an avenue by which development of social relationships occur, thus contributing to the development of personal empowerment (Arai, 1997) and increased life satisfaction levels.

In my study, I found social support networks were specialized to include others with a disability that were most often the same disability the study participant had. By connecting with someone who had shared the same situation the participant had been through, they felt comforted that someone else understood the experience: "I like the concept of being around others who are in the same predicament you've been in... I'm not the only one who is going through this" (Darryl). Holly described a source of her motivation for attendance at the program in this way: "Because you can look around and see where you have come from and where they are, and where they could have been before you got there." For participants like Holly, they could observe other participants in the program, especially participants who have just started, and gauge their progress against them. In return, Holly could also offer progress as a means of motivation for the other participants in the program.

The experience of making new friends that shared a similar situation also fostered enjoyment and emotional benefits: "I think it's good for the soul, the body, you know? And laughter, lord, don't mention that" (Izzy). Making new friends, laughter, and enjoyment are all examples of the positive social interaction element of social support theory (Taylor, 2000).

Darryl also gained strength and enthusiasm by being around other people who had also had a stroke. He discussed the differences between working out at local community gym versus working out in the fitness center at Club Rec: "I can do it with people who've been through the same thing I've been through. It gives some incentive to try harder... it's a wonderful feeling. I love being here. I thank God for it".

The importance of finding motivators to keep participants like Darryl physically active was important to their recovery. Pre-morbid lifestyle choices often did not include fitness or wellness participation, so efforts to prevent another stroke needed to be a focus in any

patient's treatment plan. Gathering inspiration from other participants seemed to foster an environment of ability and motivation for patients who had had a stroke and contributed to a more positive environment for all program members.

The development of networks and friendships seemed to empower the participants to try harder, try new things, and look to their fellow Club Rec participants as friends for motivation following their stroke. According to Taylor (2000), this encouragement falls under the element of psychological backing within social support theory. This concept is evidenced by Holly's quote about a cruise she took with Club Rec in May 2004:

Yes, because I had never been on a cruise, and never been parasailing, and never thought about doing nothing like that...Yes, I had a great time, but after the stroke, I'm willing to try anything with Club Rec as long as it don't kill me.

Often participants would use their new friendships to draw strength from their fellow Club Rec participants if they were upset, frustrated, or particularly sad about certain side effects from their stroke. Neo described using another participant as a source of strength and motivation this way:

For example, Rhonda had a stroke, and right now she moves beautifully, and I wouldn't mind being able to move like she moves, but she has a problem with her speech, and I don't have a problem with my speech. But physically I would like to be where she's at, and I'm sure she would like to talk like I talk. But I see her and I say, "One day, one day I'm gonna beat you." I'm very competitive that way.

Sharing experiences and disappointments with others was not only a means of purging negative feelings, but also a way to brainstorm and network about ideas to accomplish a task or meet a goal:

You see Jimmy walking down the hall, and you look at his leg, and you say "Jim you need a brace for your leg. If you had one you'd walk better", but he's not wearing one. But I know from personal experience what you're going through, and we are on the same level.

Neo's example regarding Jimmy uses Taylor's (2000) concept of the informational support element of social support theory. Another example of Taylor's (2000) informational support element of social support theory was that many participants also spoke of exchanging tips or tools:

Yeah, because I, each individual can learn from the other one. I can pick up pointers that I didn't even think about, that somebody else is doing and they might do the same from me. So [there] is always a way. (Izzy)

This theme of social networks offered numerous insights in this study. The participants at the program varied greatly in length of time since their stroke, and many had been living with the effects for over five years. Their strokes necessitated lifestyle changes and the negotiation of barriers. Common activities in their daily life had to be altered, and participants had to adjust the way they accomplished certain tasks. According to Homqvist and von Koch (2001):

Healthcare providers need to find the best ways of supporting stroke patients so that they identify their own problems [barriers] and express their goals. Furthermore, patients should be given the opportunity to take part in both the planning and evaluation of their rehabilitation. (p. 1501)

As illustrated by the quotes, many of the participants spoke of learning a new way to achieve a goal or complete a task following a stroke that was enhanced by their Club Rec friends and development of the social networks within the Club Rec program. Learning new ways to accomplish a task often suggested by other participants appeared to affect efficacy and independence levels for the participants.

## **Family**

The sub theme of the Club Rec program as a second family emerged early in the analysis portion of the study. Consistently throughout the interviews, when asked if they had

made friends at Club Rec, the participants' responses would include some form of Club Rec as a second family:

Everybody, we're a family. Because we do things, we don't do stuff separate anymore. If you notice, we'll do it as a group now. When someone's out we ask about them... and everybody looks out for each other. So we got closer, when one is gone we feel it, like family. (Linda)

Development of this sense of family was important to many participants who would otherwise have been at home alone or who had friends that decreased their interaction with the person following their stroke. The sense of family at Club Rec also supported an element of Taylor's (2000) description of social support theory in the form of emotional support:

All my friends, my true friends, I can say there's only really two that really stuck by me. The rest of them, they come by and see me now and then, but it's like they don't really have the time to come see me. It's kind of lonely for me, but I live with my mother, and she's good to me. (Darryl)

Feelings of isolation or loneliness were also a motivator for attendance. The mean age for participants in the study was over 55. Many had been working full time at the time of their stroke, and the majority had been working overtime or working multiple jobs. Sudden loss of income, secondary to the stroke, left the participant reliant on family members or spouses to be primary income providers. The financial obligations of caregivers often left participants at home alone while the caregiver or other family members in the household worked. For this reason, the development of the sub theme of a second family at Club Rec became contributory to the overall health and well-being of the participants. Turner (1981) asserted that social networks, bonds, and supportive social interactions are imperative to a person's well-being, and goes on to say that his findings suggest "a reliable association between social support and psychological well-being" (p. 357). The importance of the feeling of family and connectivity to others in the program was best expressed by Neo: "You

people are a good influence. Who you hang out with reflects on you, and that's a good group in there. I love them to death, wouldn't change any of them for the world. All a big family."

Nurturing

Another aspect of social support that emerged during analysis was the sub theme of nurturing through leisure. This sub theme was most apparent in the women in the study and was not mentioned by any of the men. The distinction between nurturing and helping others to learn new things or new ideas must be made. Development of ideas, brainstorming, and providing support to others was discussed in aspects of friendships and family. However, the nurturing aspect was distinctly different because nurturing and helping others in their leisure was specifically mentioned during the interviews. The primary difference occurred in that the aspect of friendships did not identify the act of helping other members as the specific activity that was enjoyed but rather as something that occurred while at the program. All but one woman in the study explicitly identified helping others as an activity that they looked forward to when attending the Club Rec program as evidenced by this quote from Linda:

It helps because at first your children are gone, and you really don't have nobody to talk to... and when your children are grown, and you're used to doing stuff for somebody else. My godson moved, and I don't see him as much, so I didn't have nobody to take care of, and here I do.

Holly also described the sub theme of nurturing with this quote: "I just like being around the people that's here, and I like helping everyone if I can help. I do it from the bottom of my heart, no questions, no nothing to ask." According to Taylor (2000), the act of assisting others with activities during the program can be identified as the behavioral assistance element of social support theory. This aspect of social support that indicated nurturing as leisure for women, is related to the idea that "women's lives and their development are influenced by an ethic of care which evolves from women's dominant role or function of

nurturing others" (Henderson, Bialeschki, Shaw, & Freysinger, 1996, p. 151). The ethic of care relates to socially constructed norms of women wanting to nurture or care for others and translates into leisure participation, or in the case of this study, a provision of assistance so that others may participate.

For the women who were involved in the study, all but one stated that helping people was a reason that they enjoyed coming to Club Rec. The idea of helping others in their leisure is closely related to Jensen's (1977) hierarchy of leisure time use in which service to others is the top level of the hierarchy. The women expressed enjoyment and personal satisfaction at being able to help others in their leisure activities while at the Club Rec program. Although the female participants expressed enjoyment from being able to help others, the notion of the ethic of care may have influenced constraints to leisure or choice of leisure activities while at the Club Rec program. According to Shaw (1994):

The ethic of care is also linked to women's role as the primary caregiver in the family. Apart from reinforcing traditional notions of femininity, other forms of leisure participation can be seen to emphasize women's mothering roles and even participation in freely chosen and enjoyable activities may act to reinforce traditional notions of femininity. (p. 11)

Although the ethic of care can be constraining in many life situations, it appeared to be a positive influence for the female study participants in the Club Rec program. Many of the activities described in the nurturing sub theme did conform to traditional gender roles or traditionally held ideas of femininity. However, it appeared that the female study participants found comfort in being able to return to a traditional role in helping others, thereby restoring a sense of normalcy. Henderson et al. (1996) also noted that leisure shapes values and attitudes, and "may assist individuals in coping with change" (p.151). The nurturing sub theme did describe chosen leisure activities as shaping and promoting

traditional notions of femininity; however, it appeared that a return to the traditional role of caregiver/nurturer assisted the female participants in coping with the changes in their life resulting from their stroke. The sub theme of nurturing "reflects the real differences among women and the reasons why women's leisure does not have one size that fits all" (Henderson, 1996, p. 146). Therefore, being able to assist another person in their leisure is congruent not only with the ethic of care and Jensen's hierarchy of leisure time uses, but also with leisure as a means to help individuals cope with change.

The female participants in the study were able to obtain a feeling of nurturing or caring for other at the Club Rec program through direct involvement and participation in structured and non-structured activities at the program. For example, a study participant were observed holding a craft project steady while another participant only had the use of one hand painted the craft. Female participants also appeared to receive enjoyment from assisting staff members with set up for an activity or clean up after an activity. For three of the female study participants, part of their daily observable routine included heating up lunches or assisting other participants during lunchtime. The act of assisting other participants to complete a task or scheduled activity, or help other participants with their meals or other daily activities appeared to provide enjoyment and a sense of nurturing for female study participants in the program.

### Coping and Acceptance

Coping and acceptance emerged as a second theme. According to Iwasaki (2003), leisure coping beliefs are conceptualized as ideas and beliefs about the role of leisure as a means of managing stress. Participants in the study identified their participation in the Club Rec program as integral to their ability to cope with their stroke. Iwasaki (2003) also found

that individuals with high levels of leisure coping beliefs felt more empowered through their leisure and develop resources and perceived efficacy for dealing with life challenges and constraints. Participation in leisure activities provided opportunities for growth and may have influenced study participants to negotiate the constraints and challenges that they faced in their daily lives (Iwasaki & Havitz, 2004).

Within the coping and acceptance theme, three sub themes developed. The first sub theme was coping with the physical side effects of stroke. All but two study participants had permanent and observable physical side effects from their stroke. The physical side effects ranged from one-sided paralysis (hemiplasia) resulting in difficulty walking or loss of use in a formerly dominant hand, to facial paralysis resulting in speech difficulties. Such physical side effects left study participants feeling noticeable and sometimes ostracized when in public. Participation in the Club Rec program afforded study participants the opportunity to be in a "safe" environment with others dealing with the same physical limitations and to learn coping strategies from others. The chance to be around others with physical disabilities resulting from a stroke restored a sense of normalcy and promoted a connection to other program participants.

Emotional and psychological side effects was the second sub theme to emerge within the coping and acceptance theme. Nour, Desrosiers, Gauthier, and Carbonneau (2002) stated that, "a stroke may lead to important consequences that affect social and psychological health...and a large number are not psychologically well adjusted when they return home" (p. 49). Study participants identified feelings associated with the five stages of the grieving process following their stroke. Kubler-Ross (1969) identified the five stages of grief as anger, denial, bargaining, depression, and acceptance. Among study participants, feelings from all

five stages of grief were common, with feelings of anger, denial, and bargaining identified by all participants. Two participants may not be entirely through the grieving process as they maintained the belief that they would regain full physical or cognitive functioning that they lost when they had their stroke. Two participants also reported ongoing issues with depression at the time of the study. Feelings of sadness and anger were the most common side effects reported by study participants. However, study participants identified participation in the Club Rec program as a catalyst for positive changes in their mental health. Participation in the spirituality group, coping group, and relaxation groups were cited as helping study participants deal with the emotional repercussions of a stroke. Successful participation in leisure activities also contributed to high levels of perceived self-efficacy and willingness to return to previous leisure activities.

Productivity effects of a stroke emerged as another sub theme within the emotional and psychological side effects of stroke theme. Following their stroke, many study participants were at home and/or unable to return to work. Participation in community service programs through Club Rec fostered a mentality of productivity and contribution to the community at large. The opportunity to be independent in money management when on a community reentry outing, the opportunity to be independent in choosing to learn a new leisure activity, or the opportunity to participate in the organization of fundraisers for the Club Rec accessible travel group increased a sense of internal productivity for study participants. The opportunity to be out of the house and or to play an active role in activities at the Club Rec program increased feelings of general productivity and overall self-efficacy for many participants. For example, the researcher and Linda were preparing a garden bed for tomato plants; when asked if she was having a good time Linda replied, "Oh yeah, it's good to be outside in the

sun doing something. It's good to feel useful again." The three sub themes of physical side effects of stroke, emotional and psychological side effects of stroke, and productivity that emerged illustrated that participation in the Club Rec program provided an opportunity for development of coping and acceptance skills following a stroke.

## Physical Side Effects of Stroke

For all of the participants, the physical side effects such as loss of function on one side of the body, blurred or diminished vision, or inability to walk was the first indication that they were having a stroke. Following the stroke, many of these effects did not go away. For some of the participants in the study, the physical manifestation of stroke was the most difficult part about having a stroke: "The hardest thing about having a stroke is not being able to work again, not even being able to walk." (Darryl) Loss of everyday functioning that had been second nature before the stroke was a new obstacle, and for many of the participants, the loss of independence that accompanied decreased physical functioning was difficult to deal with:

I remember there was a policy that they [other therapy location] had to follow you to the bathroom, so I could never get to the point where I could tell somebody that I was going to the bathroom by myself. I mean why you gotta come into the bathroom? ...it got to the point where every chance I got I was sneaking to the bathroom. When I first got dropped off... I got off the van, I would hurry up and go to the bathroom like nobody could see me. (Neo)

Other participants had lasting physical effects that were not going to be amended by therapy.

These physical effects were permanent and impacted quality of life for the participants on a daily basis:

For a while I wasn't able to do no therapy, because I had muscle spasms, and each night the muscle spasms they tighten up, and I couldn't sleep at night, because I couldn't get comfortable. They doctor told me they'd be gone in three months, but they're still here, going on two years now, but I deal with the spasms. (Leroy)

For some participants, the opportunity to return to normal pre-stroke activities such as driving a car or feeding themselves was the focus of their daily activities. Although laughing while she recalled the story, Izzy remembered, "I used a spoon for a long time, cause I kept sticking myself with the fork." Holly wanted to drive again, although her family did not feel that she was fit to drive. She recalled the discussion about returning to driving:

Everybody in my family was telling me that I couldn't drive my car...I still have my five senses, long as I can remember what I'm supposed to do, I can still drive my car as long as I pass the test. And I started back to driving when I passed it.

Others had to realize how far they had to go before they would be able to return to a normal functioning level, the idea of starting from the beginning or being a "baby again" was exemplified by the following quotes:

And it was a major stroke because of the damage to my side, and I realized I was going to have to go back to work. I was going to have to work hard on doing normal things like going to the bathroom, wash myself, and dress myself, and do all that stuff again. I was basically a big 200-pound baby. (Neo)

Well, walking was [the hardest thing] for me. Just knowing you couldn't walk, you know, just like a baby you have to start all over again. And it's hard, it was even hard to feed myself. Every time I would try to feed myself, everything would go all up here, past my mouth. (Izzy)

The physical side effects were still present in many of the participants, and for the majority of them little functioning has been regained on the impacted side of their body. However, many of the study participants have adapted to their new way of life and the new challenges that they face as will be seen in the "moving on" theme later in this chapter.

Emotional and Psychological Side Effects from Stroke

Following the negotiation of the initial physical shock of having a stroke, the ramifications of the new and permanent changes in life emerge on the psychological and emotional stage for someone who has had a stroke. According to Holly: "When you first

realize you've had a stroke you really have to, mm, what words could I use, I guess you really have to let it sink in to know that you've really had a stroke." This second sub theme under coping and acceptance appeared to occur following the realization of physical side effects. The emotional side effects included anger and frustration most often. However, feelings of sadness, worthlessness, and isolation also manifested as results of the emotional and psychological effects of a stroke. Linda described the difference between her outlook at the time of the interview in comparison to how she felt from an emotional perspective directly following her stroke, "I'm a lot better now than I was, because right after I got sick, and I couldn't do nothing, it makes you feel useless, dumb, handicapped, stupid, frustrated-really frustrated." Feelings of anger and frustration were the most common descriptions of emotions following the stroke; every participant also expressed feelings of sadness and loss. Leroy, a tall and athletic man described his emotional response to the stroke with these words:

Because when you have a stroke, and you can't do things that you used to do, and you get frustrated and you get mad. And your emotions show a lot. I cried a lot, but then I found that crying don't help.

The initial shock of having a stroke was also difficult for participants. The realization that life would never be the same, or that the physical disability would be permanent was often a troubling one. Feelings of isolation or disconnection from the rest of normal society were common. Initial focus was on the departure from normalcy for the participants rather than a focus on survival. The following quote from Neo exemplifies the focus on being different:

Life's a big game. You ever play hide and go seek with a bunch of kids? And somehow you got chosen to be it, a stroke is like playing hide and go seek and you're it. You realize you're it when kids are running and hiding from you. And you realize you're different.

Other participants felt the psychological side effects of stroke, not only for themselves, but also with their families. A stroke affected not only the person afflicted, but also family members and caregivers. The newfound stress of caring for a loved one would often evolve into anger, resentment, or frustration in the caregivers as well as the participant. The buildup of stress caused from caring for a family member combined with the emotional stress of witnessing the struggles of a loved one manifested itself in short tempers or outbursts of frustration and anger for both parties. The following example demonstrated how speech or cognitive side effects from a stroke can add stress and contribute to miscommunication between caregivers and a participant:

But see, sometimes your family don't understand, because maybe I do say something sometimes and put it the wrong way. They say you know, "you hurt my feelings, this and that", but that's not what I meant, but then they holler at you like you're stupid. They say, "You shouldn't a did this momma, you shouldn't have said that" but I didn't mean to do it [crying]. (Linda)

For many participants, communication issues extended to feelings of embarrassment or a desire to decrease communication with family members. Awareness of the uneasiness that family members had with their disability presented sources of frustration or difficulty for participants. Recognition of their own deficits exacerbated problems regarding communication with family members and friends for many participants. For many participants, knowing they had messed up words, sentences, or comprehension when talking with family members made them nervous or cautious. During interactions with family and friends, feelings of stupidity or awkwardness would often surface as evidenced by this quote from Carolyn:

And even as far as communicating with my sons, I got two boys, and I got one that's 21. He's getting ready to leave soon, but you know I'll talk to him and stuff and I can sense that he's hearing me and listening to me, but it's like I'm talking to him like I'm

a youngster, repeating things. He'll say "You told me that one time, you done told me that two times already" or whatever you know.

Another emotional side effect of having a stroke was that participants now identified themselves as handicapped or disabled. For participants, the identification with disability became an inherent part of their personality, and the stroke became a part of how they viewed themselves internally and socially. Leroy expressed the identification with his disability like this: "Because if I come back full strength, there's still gonna be part of me that's always gonna be handicapped." The previous quote exemplified how many of the participants felt regarding their disability regardless of progress made in rehabilitation.

Although participants now identified themselves as handicapped, the distinction was not always a negative one. For many participants, the new classification they gave themselves acknowledged changes in their life and encouraged them to work harder toward their goals. The participants also clearly identified themselves as stroke survivors. No participant used the phrase "stroke victim" in any of the interviews.

Productivity Side Effects of Stroke

Another aspect of the coping theme centered on issues of productivity as it related to quality of life. Quality of life and life satisfaction are difficult psychological constructs to measure. For many participants in the study, quality of life was directly related to productivity levels, ability to be a productive and financially contributory member of society, or relationships with family and friends.

For many of the participants, participation in leisure activities or the Club Rec program was originally diversionary or mandated by their caregiver. A number of the study participants had cognitive processing issues or short-term memory loss, which made caregivers unwilling to let the study participant stay at home alone. Awareness of deficits,

inability to stay at home independently, or inability to return to work and contribute financially to the household income appeared to leave some participants with a feeling of loss of productivity. Feelings of loss of productivity or financial obligations of Club Rec program participation left some participants initially reluctant to attend the program. Some participants were also initially reluctant or unsure about what to expect and often needed convincing from another person. Linda said:

She just said, "Mom, you like people, so this is something that you would like." She explained it to me that I could be around people, and she knows I like helping people so she said, "You like helping people, you can do things, go places, so you won't be bored sitting at home."

Although some participants were initially skeptical, others found that they wanted to come to the program, because they had been sitting at home following their stroke.

Henderson et al. (2001) stated, "Leisure may come from any experience where one's motives, rather than the activity or the time in which the activity is pursued, are of prime importance" (p.15). For some study participants, the motivation to be involved in activity outside of the home was the catalyst for joining the Club Rec program. Although the program was designed to provide leisure activities, the primary motivation for some study participants was derived from choosing to participate and not only from the participation itself. Holly was one of the participants who was self- motivated to attend Club Rec:

I was at home for about two weeks, then I came here... I felt like that it would be something to motivate me more than I was being motivated, 'cause I know if I sit at home 24/7 watching the walls, strange things could be happening. I wouldn't be probably as far as I am today. I wanted to be active and be around different people, meet different people.

Loss of productivity was not only related to work or income, but also daily tasks of living such as going to the bank or daily chores at home. Independence and productivity were

closely linked for participants. Holly described how the program fostered a sense of independence for her with this quote:

Because you all let me go for it, you don't hold me back. You all help me and I don't need nobody telling me what I can't do all the time, and you all tell me what I can do. You know, so that has helped me a whole lot.

Izzy talked about how the stroke influenced her feelings of productivity: "Because I just didn't want to be depending on other people. I'm just so used to doing things by myself.

Now I do everything. I go to the laundromat, to the grocery store." Some participants had lost the ability to process the bills or understand household issues. Carolyn described the loss of functioning and productivity from a household point of view:

I used to could do a lot of things, and I didn't have problems with understanding... like understanding the papers that be coming in and all that. I was the one that picked up the paper and understood all the paperwork that came through the house or whatever and now it's like "What is this?"... that's hard for me.

Conrad (1985) found that a main issue for people had a stroke is how to re-establish their normal life and daily routines and to exert some control over a situation of profound uncertainty. Restoring a sense of productivity was essential to psychological well being and acceptance of the stroke (Helliwell, 2003). Increasing productivity in an area of life contributed to overall outlook and attitude (Becker & Kaufman, 1995; Lock, Jordan, Bryan, & Maxim, 2005). The idea of both increasing productivity and ability to complete activities as contributing to attitude and outlook on a personal level was evidenced by this quote from Holly:

I think maybe at one point I felt like I wasn't gonna do it, but they kept on pushing me. And all the people that I have met in Club Rec have really motivated me to want to do different things. I think I can do most anything that anybody in here can do now, and there some people who can do but won't do, you know? And I do.

"Moving on"

The title for the "moving on" perspective of the coping theme was selected because it was specifically called moving on by almost every participant. Participants all spoke of having to accept the fact that they had had a stroke and move on with their lives. Initial feelings of shock or confusion transformed into feelings of anger and resentment, and eventually coping and acceptance. The process can be associated with the five stages of grief (Kubler-Ross, 1969), but for many participants, having others around helped the process of dealing with their stroke. Some study participants arrived still in the beginning of their grieving process, as is evidenced by this quote from Darryl: "It was real emotional when I first came, I thought I wasn't gonna walk again, I wasn't where I wanted to be... but now I think Club Rec fits into my change in life after having the stroke."

For the participants, the stroke was now something that was part of how they identified themselves, but was not something that would hold them back from participation in life. Participants realized that the stroke was not the end of their life, and that there was much more to do: "You don't need to be sitting in the corner or sitting around feeling sorry for yourself because it's not going to help. You gotta just move on with life" (Izzy).

The decision to move on with their life was often a result of a deliberate attempt at change of attitude. The conscious decision and effort by participants to alter their outlook on life or choose a specific mind-set contributed directly to their improvement and rehabilitation following the stoke. Carolyn described her attitude change in the following way: "I'll be really really working hard on stuff like that. I'll really be trying, and I have made up my mind I'm not gonna be too sad about things being different." The moving on theme is not about denial of the stroke or ignorance of the effects of the stroke, but acknowledgement,

awareness, and acceptance. To suggest that the coping and acceptance theme came without introspection and emotional pain was false. For many of the participants, acceptance of the stroke occurred over a long period of time, and they realized that life would never return to the way it was. The participants also realized what a life altering occurrence stroke was. However, the ability to convey that message to other people was often difficult. Once the realization of changes and acceptance had occurred, only then could a participant like Neo move on with their life:

Little children come up to you and say, "You can't walk right, what's wrong with you? What's wrong with you mister?" Happens to me all the time in church. Kids come up to me and say that, and I'm saying, "It's a stroke" and he says, "What's a stroke?" and I say, "Just pray that you never have to deal with it." But it's that kind of situation, and it's just something that you have to accept.

Acceptance of the side effects and the decision to move on with life were boosted when participants also adopted a positive attitude. Many participants needed to learn how to walk again, feed themselves, and drive. However, once the conscious decision had been made to move on with life within a positive mindset, study participants refused fail in meeting their goals: "I would fail at a lot of things, but I didn't give up. I just kept trying. I said well the next time I'm gonna try, but of course I fell too, but I didn't let that stop me." (Izzy) Izzy's fall was both literal and metaphorical, although she physically fell, the act of getting up represented a desire to get up and keep trying and improving for her.

The participants who realized the positive impact an optimistic attitude had appeared to be more successful with regard to their participation in the Club Rec program. However, not all Club Rec members were able to reach the point of the moving on, and for others the effort to maintain a positive attitude was a choice they made every day. Five of the thirteen study participants noted that they still had problems with depression, and three of the study

participants were on anti-depressive medications. However, the study participants that expressed a consistent effort to have a positive attitude reported that they think they are doing very well.

Although awareness, support networks, and education all contribute to participants moving on with their life following a stroke, their motivation still had to be intrinsic. The level of participation while at the Club Rec program was something that was decided by each individual. The decision to actively participate in activities and to receive the potential benefits was something that could be encouraged by staff and other participants, but ultimately came down to a personal decision by each study participant. Motivation for life and participation in leisure at the Club Rec program was something that participants had to look within themselves to choose and ultimately to move forward with their life:

So you gotta look at what you got sometimes and say, "I gotta work with this, I gotta be happy with this", and that's the way I'm looking at it now, you know? This is my life now, this is what I'm gonna be happy with (Carolyn).

Leroy also described the change in his attitude and his personality after he decided to move on with life: "But I see the change. One thing, I got to the point like I said before, the stroke is here, I accept it, and I'm dealing with it. That's all I can do...it ain't going nowhere." Conscious decisions to change attitude, outlook, or to be happy with their life now were key factors for many of the participants to begin moving on with their lives following the stroke (Tallbot, Viscolglioso, Desrosiers, Vincent, Rousseau, & Robichaud, 2004). The opportunity to achieve this change through leisure participation and enjoyment emerged at the Club Rec program. The role that leisure participation played in moving on with life following a stroke will be discussed in the next theme.

### Leisure Participation

The third theme that emerged during qualitative data analysis was leisure participation.

The two sub themes of participation and enjoyment, and attitude and motivation developed within the leisure participation theme.

The first theme that developed was participation and enjoyment. For a majority of the study participants, leisure had been an afterthought prior to their stroke. Izzy was an exception, as she was active in the American Legion and frequently socialized or attended trips with friends from the American Legion:

Well, with the American Legion we always had something going on, every other Saturday, and it was a dance, or a function, or a convention, either Virginia Beach, Hampton, Roanoke, out of state, on the go... always was something to do. And they used to tell me I don't ever ever stay at home, but like I tell them I don't have anything to stay in for, you know?

For the rest of the study participants, however, leisure was valuable time that were spent working or making poor leisure choices, such as with Darryl who was involved with drugs prior to his stroke. Participation in the Club Rec program offered the opportunity to explore new leisure interests or to participate in structured leisure activities for the first time in many years. For a number of study participants, the Club Rec program provided their first experience with a fitness center or activities such as crafts, skiing, or horseback riding. *Participation and Enjoyment* 

Although the survey tool used in this study had excellent validity ratings for assessing life satisfaction, a need to examine specifics beyond the statistical factors that influence life satisfaction levels emerged. During the interview process, the role of leisure as a mechanism for increasing quality of life emerged. Participation in leisure activities both alone and with friends promoted increases in self-efficacy, self-esteem, and overall well-being. Participation in leisure activities had not always been a priority for participants, and many were

experiencing and understanding the benefits of leisure for the first time. Darryl, who had been a self-proclaimed workaholic, appeared to be transferring that aspect of his personality to his newfound enjoyment of leisure activities with this quote: "I love it, I look forward to it. If you were open on Saturday and Sunday, I would come those days too."

The personal enjoyment that participants received from coming to the program was also a motivator for attendance. The benefits that the participants received were apparent to them, and the benefits were also a motivator for attendance:

I get a lot out of it. I come in, I speak to everybody... I pat 'em on the shoulder or say "how ya doing?". I just look forward to being around people, helping people, you know? Something I really look forward to. (Izzy)

Involvement in a variety of leisure activities provided a source of enjoyment for the participants. Programs were offered for a number of interests and abilities. Some of the more "hands on" or craft activities included woodworking, ceramics, adaptive knitting, and floral arranging. Cognitively oriented activities included speech and communication conversation groups, group and individual word games, and memory worksheets and games. Physical activities included the fitness center, access to the therapeutic pool, or adaptive horseback riding. Participants were provided with the opportunity to try new and different activities each week and enjoyed the variety of choices offered for activities: "I wouldn't go to another program because I wouldn't want to sit around all day. I like it here because you all do something different every day" (Linda).

For participants who had led limited leisure lifestyles prior to their stroke, the opportunity for participation in an assortment of activities appeared to result in high levels of enjoyment and motivation. The study participants all attended a varying number of days.

The lowest number of days of attendance per week was two, and a number of the study

participants attended the Club Rec program five days per week. The participants who attended the program five days per week whether by personal choice or as dictated by doctor's orders, were the participants that reported the most benefit from being in the program. Participants that attended five days per week reported perceiving themselves as more physically fit, more active, and stated that they had more positive attitudes regarding their health and leisure than before participation in the program than others who attended fewer days per week.

#### Attitude & Motivation

Attendance at the Club Rec program was also a contributor to a change in attitude in the participants. Although they are linked, the attitude sub theme should not be confused with the leisure participation sub theme. The sub theme of leisure participation addresses the actual act of participating and choosing to participate. The attitude sub theme addresses the notion that overall attitude toward leisure and the level of priority that leisure has in their life has changed. Participation in leisure activities is an external manifestation of a change in internal attitude. Although participation in the Club Rec program appeared to influence attitudes regarding leisure, lifestyle, and self, the change in attitude toward leisure participation was the motivator for achieving desired benefits. Intrinsic motivation and a positive change in attitude provided a catalyst for the change in leisure participation levels. Leisure participation had never been a high priority. However, when provided with the opportunity to participate in many different kinds of leisure and recreation opportunities participants began to enjoy and understand the role of leisure. Prior to having a stroke, many participants did not participate in leisure or recreational activities, and involvement with the Club Rec program changed their outlook:

Since I've had the stroke, it has brought my attitude out to me better. Cause before I didn't have a life. It was just work work work work, one job to the next, one job to the next, home in the bed to sleep, jump up and go to work the next day. Didn't have a life, but now I feel like when I come to Club Rec every day I feel like I have a life." (Holly)

A negative outlook toward leisure prior to their stroke often manifested in poor leisure choices for participants. Although negative choices had been made in the past, "People are seen as motivated by a basic tendency to seek growth...and self-enhancement" (Austin, 1991, p. 30). The motivation to seek growth and self-enhancement was evidenced by the changing attitude toward leisure and recreation participation. Darryl had worked at least two jobs for most of his life, and sometimes three. When Darryl was asked about his change in attitude toward leisure, he responded:

It showed me how good that it can be for your life, period. Even if I was to return back to work... it showed me a new way of life, a different way of life. I would never go back to the old life that I had, especially the drug part of it. I learned how to take care of myself better.

Positive change in attitude was a reflection of the leisure education and values clarification activities offered at the Club Rec program. According to Simon and Olds (1977), values clarification has seven steps, and the process can be related to clarification of values regarding leisure participation. The seven steps are option exploration, appraising consequences, freely choosing, happiness with choice, informing others of choice, determining action, and making the value a part of one's life as is evidenced by Darryl's previous quote. The relationship between leisure participation was closely related to all of the steps, but particularly the steps of exploration, freely choosing, happiness, and making the value a part of one's life. Holly expressed how she used the steps to determine her participation levels at the Club Rec program:

I haven't been to no other programs, so I can't say... but I hear people talk about where they go, like they don't do anything. They just sit there all day long and don't motivate themselves. They just sitting there look at each other. You can do that at home, and look at the four walls. But I don't want that. I choose to get out and meet different people and do different things. The way I'll be around here flaunting around doing different stuff. That's me.

Values clarification activities at the Club Rec program served to change attitude toward leisure and recreation participation on a number of levels including actual participation in an activity and attitude toward participation. Positive changes in attitude and values resulted in increased participation and outlook regarding leisure as an integral part of lifestyle for study participants.

People who had a stroke are often on limited incomes, because they are unable to work or their household has become a single income household following their stroke. While Sheltering Arms does offer financial assistance, for many people their financial obligations were too high to permit attendance five days per week. According to Linda: "It's a place that anybody would like to be here. If they could afford it, a lot of them would come every day, but they can't afford it." Linda attended the Club Rec program five days per week, and has stated that even if she returns to work, she states she will still come to the Club Rec program part time. For a number of participants at the Club Rec program cost was an issue, and one of the study participants volunteered with the program doing clerical work such as copying or labeling envelopes to help pay for one of her days of attendance. However, the fact that many participants on a limited income chose to spend their money to attend the program at least once per week is a testament to their attitude toward the importance of leisure.

Motivation for participation in leisure activities and attendance at the Club Rec program was apparent on a number of levels and for multiple reasons for study participants. For some participants, the primary motivation was to improve health, and return to activities

they took part in prior to their stroke or to return to work. Neo cited one of his primary motivators for attendance as using knowledge that he had to return to a level of productivity he had before his stroke: "I know the mistakes I made, and I got all this knowledge, and I know what I'm doing, what I have to do, so I'm gonna start all over again and start from scratch. That's what I'm doing." Other participants found their motivation in a desire to connect with others and have something to look forward to in their days:

I first went to Bon Air, then I think I was there for about six weeks. Then after that I was at home for two weeks, and I said 'I just can't sit here like that', you know cause I'm a person, I don't watch soap operas. So that's when I called Donna and she told me about Club Rec, and oh man, I was good to go then. I got something I look forward to, I sure do. (Izzy)

Other study participants found motivation in the progress that they saw while they were attending the program. Increases in strength, functional mobility, ability to achieve daily tasks, and balance were at functional levels that the participants were not able to achieve when they first began the program. Gains in areas or abilities provided daily motivation, and increased self-efficacy levels, as is evidenced by the following quote from Neo: "Because I'm doing things now that six months ago I wasn't doing, I'm noticing that stuff. I'm saying to myself, I'm doing this, I'm zipping up my jacket, when six months ago I know I couldn't do that." An activity as simple as being able to zip up a jacket may seem trivial to someone who has not had a stroke; however, for a person who has had to relearn everyday activities, such gains provide enthusiasm for continued participation in a therapeutic recreation program and continued work toward personal goals.

Being around other participants that were achieving their goals was also a source of motivation for study participants. Low initial levels of motivation were amended by support and encouragement from others at the program. Often, the therapists can attempt to provide

motivation for participation, but the other participants who have shared a common experience are far superior motivators in comparison to the efforts of the therapists. Because of the shared experience, participants drew from the strengths, gains, and abilities of others when developing their own sources of motivation as is evidenced by this quote from Holly: All the people that I have met in Club Rec have really motivated me to want to do different things. Overall, participants reported increased motivation in multiple areas, not only in leisure and recreation but also in daily activities and recovery.

The Relationship between Social Support, Coping & Acceptance, and Leisure Participation

The relationship between the three themes is complex, and each theme influences the others. A common thread among the relationships between themes was the sub theme of leisure as a means to an end that will be discussed in-depth in chapter five. For all goals, including clinical goals set by the therapists and personal goals set by the participants, recreation was the treatment modality. Participation in recreation activities at the Club Rec program provided participants the opportunity to develop social support networks with others who shared a common experience. Through the development of the social support networks, the sub themes of friendships, family, and nurturing emerged. The development of the three sub themes contributed to the leisure participation sub theme of participation and enjoyment, and a cause and effect relationship was established. Because participants enjoyed the development of relationships within their support network through leisure activities, they continued to pursue those activities with their group, and their leisure participation was increased.

#### Summary

Quantitative data analysis established that high levels of self-efficacy, leisure attitude, and life satisfaction were already present in study participants. Qualitative methods were included to both explain quantitative results and provide more in-depth explanations for the research questions. Qualitative data analysis provided three main themes to help explain increased levels in self-efficacy, leisure attitude, and life satisfaction. The three themes to emerge were leisure participation, development of social networks, and coping and acceptance. Emergence of the three themes provided insight and explanation for how participation in the Club Rec therapeutic recreation program promoted increased levels of the three constructs examined by the research questions. The overall benefits of participation in the Club Rec program is best evidenced by the following quote from Carolyn:

And one thing is I know when I'm getting help, I know that. Because I have been in the medical field for so long, that I know when I'm being helped, and I have gotten help from being here. Cause I used to go out to make sure I can help others. That was my job as a nurse, and I loved it, and I know that I've gotten it from here.

#### CHAPTER FIVE: CONCLUSION

This study explored the perceptions of a structured recreation therapy program related to life satisfaction, self-efficacy, and leisure attitude for African American adults that have had a stroke. Operating from the theoretical framework of social cognitive theory, the study attempted to determine how participation in a structured recreation therapy program influenced experiences of the participants' self-efficacy, life satisfaction, and leisure attitude, and to gain a better understanding of participants' perceptions of leisure and Club Rec. This chapter will include a discussion of my major conclusions from the study followed by the implications and recommendations for research and practice.

#### Conclusions

Conclusion One: The Influence on Self-Efficacy

My conclusion from the data indicated perception of a positive relationship between Club Rec participation and self-efficacy. Quantitative data established a high benchmark for self-efficacy scores for the study participants based on total possible scores. High benchmark scores indicated the appropriateness of qualitative data collection to further examine the reason that scores were high. Wise (2002) discussed the role of recreation and leisure participation in increasing self-efficacy for people with disabilities. I believe that this study supported the concept of increasing self-efficacy through leisure participation through the emergent concepts of social support, negotiation of physical and emotional side effects, an increase in productivity, and on the most basic level, participation and enjoyment of leisure

activities. The following paragraphs discuss the relationship between the data and conclusion one.

The concept of a second family emerged within the social support theme as a means of increasing self-efficacy through use of a model (Wise, 2002). Having a second family of participants that identified with a similar situation provided the participants the opportunity to increase self-efficacy levels through leisure involvement. Participants saw others that they identified as an extended family with the same deficits achieving success. This illustrated to study participants that success in a task could also be possible for them, thereby encouraging them to participate. In addition, having other participants that they trusted encouraging study participants to try an activity and succeed appeared to influence study participants to perceive themselves as more efficacious and to attempt more activities in the future.

Negotiation of physical side effects emerged within the coping and acceptance theme as a way to increase self-efficacy levels. Koenig and George (1998) discussed the impact of physical side effects of a disability and depression following discharge from an inpatient setting, and negotiation of the side effects through participation in the Club Rec program offers a means for negating depressive feelings and increasing self-efficacy. Loss of physical functioning following their stroke left many study participants wary of attempting activities or tasks that they could have easily completed prior to their stroke. The Club Rec program and the support of the therapists and other participants provided the participants the opportunity to participate in a safe environment with adaptive equipment and knowledge of others. Using ideas from other participants and adaptive equipment provided by the therapists encouraged study participants to attempt an activity and to achieve success. Successful attempts in a supportive environment may have increased levels of self-efficacy

that transferred to other physical tasks both related to leisure and to other functional areas of their life.

Negotiation of emotional side effects also emerged within the coping and acceptance theme in support of conclusion one. Robinson-Smith (2004) identified emotional side effects as having a detrimental impact on self-efficacy levels as "stroke survivors often become self-critical and pessimistic if they are unable to perform a valued task, such as cooking for family" (p. 65). Involvement in the Club Rec program offered study participants the chance to increase levels of self-efficacy through leisure. Feelings of loss, sadness, or depression left study participants with reported decreased levels of perceived self-efficacy regarding their ability to complete everyday activities of life. Participation in the Club Rec program afforded study participants the opportunity to negate down feelings through leisure involvement. Activities designed to increase levels of functional mobility combated feelings of loss by providing strength and success at a task, thereby increasing levels of self-efficacy.

Productivity emerged as the final concept within the coping and acceptance theme that increased self-efficacy levels. Kahn-Bourne and Brown (2003) linked loss productivity following a stroke with depression and other emotional side effects. Inability to work or complete everyday tasks that were second nature prior to their stroke left some study participants with reported feelings of a loss of productivity. Opportunities for leisure involvement such as gardening, cooking, or woodworking while at the Club Rec program increased feelings of achievement and accomplishment for study participants. Successful, productive accomplishment of a task that provided tangible results increased levels of perception of self-efficacy for study participants. The ability to accomplish a task successfully and to have a concrete result yielded feelings of achievement and happiness

through which life satisfaction was increased. Therefore, increased levels of productivity potentially promoted increased levels of both perceived self-efficacy and life satisfaction.

Returning to Wise (2002) and the conclusion that participation in leisure activities influences self-efficacy levels, participation and enjoyment emerged as the final concept supporting the first conclusion. Most study participants had limited leisure participation levels prior to their stroke. Club Rec membership increased levels of leisure involvement for all study participants. The study participants became involved in activities they had not been involved in prior to their stroke, or had not been able to accomplish following their stroke such as knitting, exercising, or gardening. Successful negotiation of barriers increased success and attempts at the leisure task, thereby increasing levels of self-efficacy for study participants.

### Conclusion Two: The Influence on Life Satisfaction

The second conclusion identified a positive perceived relationship between Club Rec participation and life satisfaction. King (1996) linked leisure activities and quality of life following a stroke, and participation in the Club Rec program also had a positive relationship with quality of life for study participants. Quantitative benchmarks established high life satisfaction scores for study participants, and indicated mild to moderate correlations between time in the program and life satisfaction levels. Qualitative data analysis provided explanation for the scores and relationships. Participation in the Club Rec program provided a means for increasing life satisfaction through development of friendships, nurturing, negotiation of emotional side effects, productivity, the opportunity to move on following a stroke, and participation in leisure activities.

Development of friendships was the first sub theme to emerge within the theme of social support in concurrence with conclusion two. In a study following 655 stroke survivors, Boden-Albala, Litwak, Elkind, Rindek, and Sacco (2005) linked the benefits of developing friendships and positive outcomes following a stroke. Development of friendships through participation at Club Rec contributed to life satisfaction through leisure. Participants reported wanting to be involved with the activities, because they had friends completing activities with them, motivating them to participate, and offering assistance and support in their activities, thereby increasing opportunities to receive benefits and to increase life satisfaction levels.

Nurturing was the second sub theme within the social support theme that substantiated conclusion two. All but one of the women involved in the study described receiving enjoyment through helping others with their leisure pursuits while at the Club Rec program. The feeling of helping another and resuming a comfortable and familiar role of nurturer from their pre-stroke life provided for increased levels of life satisfaction for female study participants. In helping and nurturing others in the program, the female participants in the study were achieving the highest level of Jensen's (1977) hierarchy or leisure participation "service to others" (p. 12). Service to others allowed female study participants to receive the intrinsic benefits of leisure at the highest level, and in doing so increase their life satisfaction levels.

Negotiation of emotional side effects within the coping and acceptance theme also supported conclusion two. Kahn-Bourne and Brown (2003) noted that unsuccessful negotiation of emotions following a stroke negatively impacted rehabilitation outcomes. Participation in the Club Rec program afforded opportunities to identify and to deal with

emotions following a stroke. Activities such as the spirituality group or the coping group addressed issues of sadness, loss, and depression, thus increasing levels of life satisfaction.

Participation in leisure activities also provided a means for increasing life satisfaction levels for study participants. Parker, Gladman, and Drummond (1997) asserted that "leisure has been shown to be closely associated with life satisfaction and would be a worthwhile goal of rehabilitation" (p. 1) for stroke patients. Increased opportunities for participation in structured recreation opportunities provided for increased levels of enjoyment for Club Rec participants. The concept of participation and enjoyment afforded study participants more opportunities to receive the benefits associated with leisure involvement, and resulted in increased levels of life satisfaction.

Perhaps the most important concept that emerged in support of conclusion two was moving on. Hellgeth (2002) identified the need to accept a stroke and move forward with life as instrumental in dealing with a stroke effectively. Study participants consistently expressed the need to accept their stroke and move on with their life, and indicated participation in the Club Rec program had helped them do so. Study participants first had to address the fact that their life was going to be permanently impacted by their stroke. After acknowledgement of this fact, the choice of moving on presented itself to study participants. The opportunity to be around other people that had been through the same choice provided support for the participants in the study. By observing others involved in leisure activities enjoying participation and moving beyond the constraints of their stroke, study participants were motivated to do the same. The idea that one could have a stroke, make a conscious choice to move on, and not just exist but thrive was evident to study participants. The choice

to move on, actively engage, and flourish was identified as a contributor to increased levels of life satisfaction for study participants.

Conclusion Three: The Influence on Leisure Attitude

Conclusion three identified a perceived positive influence on leisure attitude through Club Rec participation. Quantitative data analysis illustrated limited, positive correlations, and qualitative data analysis provided explanation for the positive correlations and established confirmation for conclusion three through emergent themes and concepts. The concepts of friendships, negotiation of physical and emotional side effects, participation and enjoyment, and motivation and attitude were most instrumental in providing support for conclusion three.

Development of friendships provided a catalyst for increasing leisure attitude. Kyle and Chick (2002) discussed the social aspects of leisure participation and attitude towards leisure, and the Club Rec program offered the opportunity to for group based leisure participation and socialization. Making friends during participation in the Club Rec program also contributed to an increase in leisure attitude. The opportunity to receive enjoyment from activities with friends provided for a positive outlook toward leisure and increased motivation to participate, and in doing so increased levels of leisure attitude for study participants.

Successful negotiation of physical side effects provided justification for conclusion three. Fines and Nichols (1994) examined the relationship between recreation participation and leisure attitude following acquisition of a physical disability and found a positive relationship. Negotiation of physical side effects through participation in the Club Rec also provided support for increased levels of leisure attitude. Learning a leisure activity or skill

that participants had not been able to accomplish since their stroke, or had not been involved in before their stroke became a catalyst for change in leisure attitude. The success in new activities or skills supported an intrinsic concept that the people who had a stroke could be actively involved in leisure regardless of physical limitations. The idea that despite physical side effects, study participants could still pursue leisure activities and excel in them supported an increase in levels of leisure attitude through leisure participation at the Club Rec program.

Successful negotiation of the emotional side effects following a stroke contributed to positive changes in leisure attitude. Hamedani et al. (2001) identified links between leisure participation and negotiation of emotional side effects. Negotiation of emotional side effects contributes to positive changes in attitude toward leisure. Many of the study participants had feelings of frustration or inability to participate successfully in a task. Successful reconciliation of these feelings through leisure participation provided for increased levels of leisure attitude. Successful participation in leisure activities using adaptive equipment also negated feelings of loss or frustration, and illustrated that participation in leisure was still possible, which also increased levels in attitude toward leisure for study participants.

The concept of participation and enjoyment also emerged in concurrence with conclusion three. Riddick and Stewart (1994) noted positive relationships between leisure participation and leisure attitude, and the results of this study supported that result. All study participants reported increased levels of leisure involvement and enjoyment from their leisure when compared to before their stroke. Positive attitudes toward leisure because of Club Rec attendance providing support for the conclusion that levels of leisure attitude were positively influenced by Club Rec participation.

Motivation and attitude was perhaps the most important concept related to conclusion three. The importance of addressing motivation and depression following a stroke was discussed by Bush (1999), and noted that stroke survivors that had low levels of motivation and depression had higher mortality rates in the first year following their stroke than patients that did not. Participation in the Club Rec program offered the opportunity to not only combat feelings of depression, but also to address issues of motivation. Study participants consistently described involvement in the Club Rec program as increasing levels of motivation to be involved in leisure activities or to try a new leisure activity such as horseback riding. The opportunity to participate in an activity with a recreation therapist that could provide training with adaptive equipment or provide one on one assistance increased motivation to attempt a new activity, increased levels of attitude toward leisure participation, and levels of motivation in general.

Conclusion Four: Therapeutic Recreation, Social Support Networks, and Overall Well-Being

My fourth conclusion is that development of a social support network of fellow survivors increases overall well-being, and structured group therapeutic recreation activities was an effective way to develop a "second family" of support. Taylor (2000) outlined the elements of social support as emotional support, informational support, psychological backing, behavioral assistance, and positive social interaction. This study provided evidence that achieving benefits from all of the elements of social support as defined by Taylor (2000) is possible through structured group recreation activities.

Shannon (1997) identified social support as a key element in the recovery process. The opportunity to develop a significant social support network is especially important for people with an acquired disability, as they may feel ostracized from society (Damasio, 2003).

Participation in recreation activities in a group setting presents people with disabilities the chance to participate in a safe environment where their disability connects them to others, rather than separates them.

Achieving positive benefits through leisure involvement provided a unique opportunity not available through traditional support groups. Because of the holistic nature of therapeutic recreation (Widmer & Ellis, 1997), participants in the program could develop positive support networks and increase well-being through a variety of activities. Involvement in a structured therapeutic recreation program included opportunities for identification with others, encouragement, and negotiation of barriers in an environment that was enjoyable. Bandura (1991) discussed the concept that people are more likely to continue in activities that they find enjoyable and achieve success in. Study participants were more likely to continue attending the Club Rec program because of the enjoyable nature of recreation activities and the successful negotiation of barriers discussed earlier in the chapter.

Therefore, participation in a therapeutic recreation program that provided holistic treatment benefits in conjunction with the opportunity for the development of a second family presented as an effective means for development of positive social support networks, achievement of positive outcomes following a stroke, and increasing overall well-being.

Conclusion Five: A Common Experience through Leisure

My final conclusion is that an outpatient structured group therapeutic recreation program appears to have worked with study participants, and should be considered as an integral part of the continuum of care following a stroke. During the course of the study, qualitative results and thematic relationships came together to form a model for why a

structured group therapeutic recreation program for adults that have had a stroke worked for study participants.

The support for conclusion five comes in the development of "The Common Experience Model through Group Leisure" (Figure 1).

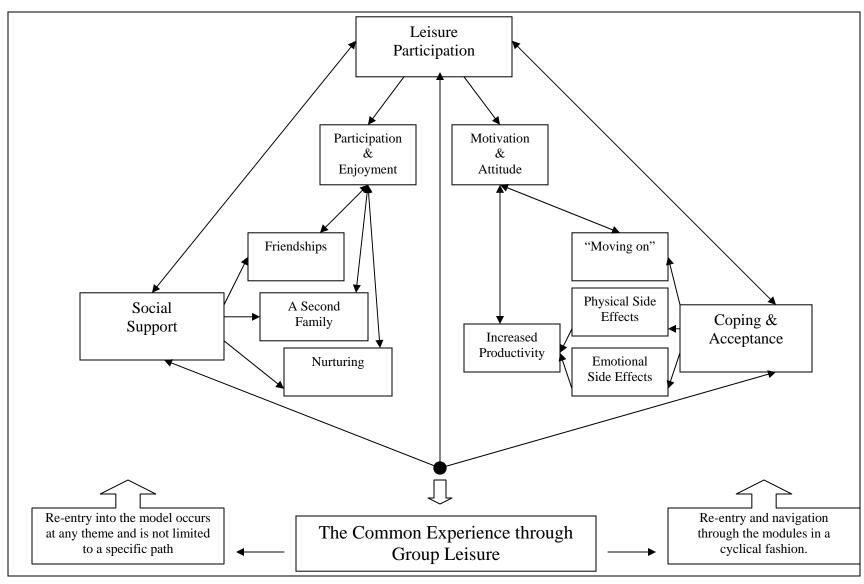


FIGURE 1. The Common Experience through Group Leisure Model.

The model begins with leisure participation in a group setting. Continued involvement in group leisure activities contribute to the development of social support networks and an avenue for awareness of the effects of stroke, labeled coping/acceptance in the model. Shannon (1997) established a need for development of social support following acquisition of a disability, and Kaufman (1988) established the need for awareness of the emotional and psychological ramifications of a stroke. The common experience through group leisure model establishes an avenue through which both needs are met through leisure participation.

Within the development of the leisure participation module, the concept of "participation and enjoyment" emerges. The concept connects leisure participation to the social support aspect of the model. Within the development of the social support module, three concepts of friendships, a second family, and nurturing emerge. The three concepts connect development of social support to leisure participation through the concept of participation and enjoyment.

Within the development of the leisure participation module, the concept of motivation and attitude also emerges connecting leisure participation to the coping/acceptance module. Within coping/acceptance, the concepts of moving on, and physical and emotional side effects leading to increases in productivity develop. The four concepts combine to influence a change in motivation and attitude through leisure participation.

The three overarching themes of leisure participation, social support, and coping and acceptance combined to create a common experience outcome for study participants.

Participation in activities at the Club Rec program encouraged the development of a social support system for study participants, influencing their ability to accept their stroke, and

helping them cope with the ramifications of their stroke. The common experience provided by participation in the Club Rec program provided participants the chance to adopt a mindset of wellness as promoted by the practice of therapeutic recreation. According to Bullock and Mahon (2001), recreation therapy is defined as "the purposive use of recreation/recreative experiences by qualified professionals to promote independent functioning and to enhance optimal health and well-being of people with illnesses and/or disabling conditions" (p. 125). I argue that the culmination of the common experience provided by Club Rec is just that.

#### Implications and Recommendations for Future Research

Research within the field has noted a distinct connection between gender, life satisfaction, and leisure attitude (Lloyd & Auld, 2002). Implications for future research from this study include a more in-depth examination of gender's role on certain psychological constructs such as life satisfaction or leisure attitude. "Social psychological research illustrates the effect of gender composition of groups for men and women" (Hodgins, El-Guebaly, Nady, & Addington, 1997), indicating that delivery of service may influence treatment or benefits derived for the patient. Examination of gender when designing group interventions for patients may be an implication for research within the field.

Another possible reason for the increased levels of self-efficacy, life satisfaction, and leisure attitude in this study is that the majority of structured recreation therapy activities offered in the program were in a group setting. The development of social support networks through leisure participation for study participants in the Club Rec program emerged as an important theme within the study. Examination of the importance of a social support network for adults who have had a stroke offers implications for research in recreation therapy.

Opportunities for people with acquired disabilities to move through the coping and acceptance process through leisure also presents as a recommendation for future research. This study illustrates that these stroke survivors were able to examine the ramifications of their stroke and develop a positive mindset toward life and leisure through leisure participation. A more in-depth examination of the relationship between leisure participation and coping and acceptance following a stroke emerges as another prospect for further research. Also related to this implication is examining the coping process with and without leisure participation following a stroke.

Examination of the body of literature indicated numerous studies regarding either single subject design (Hodges, Luken, & Hubbard, 2004) or studies that investigated a therapeutic recreation treatment modality not administered in a group setting (Broach & Datillo, 2003). Limited research exists on the impact of recreation therapy in a group setting, when further delimited by recreation therapy in a group setting for stroke survivors a disparity emerges. The current study provides implications and recommendations for further examination of therapeutic recreation programs in a group setting for adults that have had a stroke.

The concept of nurturing through leisure participation is another implication offered by this study. While nurturing and the ethic of care have been examined as a constraint to women's leisure (Shaw, 1994), this study supports the idea offered by Henderson et al. (1996) that the ethic of care can also be a positive influence on women's leisure. The thought that the ethic of care may be a positive influence emerges in that a return to a sense of normalcy and traditional roles through leisure may not be a constraint. Nurturing through leisure may actually be an avenue for enjoyment and increased leisure participation for women who have had a stroke, and should be examined in research.

This study was delimited to African Americans that have had a stroke, however, the study did not examine the cultural influences on awareness, recovery, and the selected psychological constructs that were examined. An implication and recommendation for future research includes examination of stroke recovery and recreation participation from the African American perspective with regards to health, well-being, recovery, acceptance, and the African American community as a whole.

An implication and recommendation for future research is examining the role that recreation therapy can play in the emergent healthcare model of integrative medicine.

According to Curtis & Gaylord (2004), "The American health care system has begun to produce a hybrid model [of care] that is most often described as 'integrative'" (p. 20). The Duke Center for Integrative Medicine (2006) also describes the goals of integrative medicine as optimal vitality and wellness for an individual. At the present time, a literature review on the role of recreation therapy within the integrative medicine model yielded limited results.

Both recreation therapy and integrative medicine have similar goals of addressing the biological, psychological, social, and spiritual aspects of health and illness, and this study provides support for the positive relationship between recreation therapy and the aforementioned aspects of health. Therefore, further examination of the role that recreation therapy can play in the emerging practice of integrative medicine is a resulting implication and recommendation for future research.

#### Implications and Recommendations for Practice

The development of programs that provide the opportunity for the development of social support networks following a stroke emerges as an implication for practice. The chance to be around others that are in a similar situation may provide the support and

motivation to improve and to participate in leisure activities. The combination of social support and development of friendships also lends to increased participation levels, and may be worth examining in a practice setting. If practitioners can provide an encouraging environment where people with similar disabilities can meet to share ideas, frustrations, and methods of constraint negotiation, involvement in leisure activities may increase.

Application of theory-based practice is also an implication for practice. While the process of researching a theory and designing interventions around the theory may seem like a daunting task, the use of established theory such as social cognitive theory offers support and validation for the practice of recreation therapy. The application of theory to practice also provides a well-structured mindset to design interventions that achieve the maximum amount of benefit for patients and participants.

Focusing on outcome expectancy within the practice of recreation therapy is an important implication for practice that emerges from this study. Outcome expectancy not only positively influences levels of self-efficacy for patients and participants, but can also influence levels of life satisfaction or increase levels of leisure attitude if the attempt is successful. The ability to conceptualize the positive outcome can increase the likelihood that the outcome is achieved. For practitioners in a recreation therapy setting, the activity of conceptualization provides both a positive cognitive activity for patients and the opportunity to increase levels of motivation for participation.

Participants in the present study identified limited leisure lifestyles and poor leisure choices as potential contributors to their strokes. The prevalence of recurrent strokes (American Heart Association, 2004) indicated that following an initial stroke, lifestyle changes are not made. This study offers the implication and recommendation that

therapeutic recreation and a holistic model of practice may influence changes on lifestyle and appropriate leisure choices following a stroke. The influence that therapeutic recreation can have on preventing a recurrent stroke should be considered by practitioners when designing effective treatment plans for patients following an initial stroke.

This study provides support for the idea that structured group therapeutic recreation programs may provide a more effective means of achieving positive outcomes following inpatient rehabilitation for stroke survivors. An implication and recommendation for practice includes utilization of group activities for transition back to a sense of normalcy and inclusion following a stroke.

#### Summary

The combination of baby boomers coming of age beginning in 2010 with increased life span and survival rate following a stroke or brain injury will leave the United States with a large population over the age of 65 in need of rehabilitation. Using a model of integrative medicine, hospitals can increase not only length of life but quality of life for their patients. Social cognitive theory and its concept of self-efficacy theory have been connected with quality of life, and can be an appropriate theory to operate a recreation therapy program from. Utilization of theory-based practice and research also provide the field of recreation therapy with increased levels of validity with the field of rehabilitation. The literature supports associations between life satisfaction, self-efficacy, and leisure attitude. However, the three have not been extensively examined in depth in relation to each other.

This study offers that positive changes in levels of self-efficacy, life satisfaction, and leisure attitude are possible through structured group therapeutic recreation interventions and the ensuing development of social support networks with fellow stroke survivors. Analysis

of the positive changes that occurred contributed to the development of the common experience through group leisure model, which proposes the means by which a group recreation therapy program works for adults that have had a stroke. The common experience through group leisure model examined a structured group therapeutic recreation program positively influenced the lives of stroke survivors with a multifaceted approach.

Regardless of the treatment plan design or opportunities for rehabilitation presented to a patient following a stroke (e.g., group/individual programs developed) I believe this study provides justification for the mindset that promotion of self-efficacy should be at the forefront of a therapeutic recreation intervention. Virgil stated, "They are able who think they are able", so perhaps the journey following a stroke begins with self-efficacy. No matter how an individual reacts to the situations that befall them, thinking one can do something is the first step to actually doing it.

#### APPENDIX A

#### Interview Guide

- 1. Tell me about when you had your stroke
  - a. Did you know about the risk factors for stroke?
  - b. Did you visit your physician on a regular basis?
- 2. Tell me about the most difficult thing about having a stroke
- 3. Discuss how you found out about the club rec program
- 4. Do you enjoy the club rec program?
  - a. What do you like about the program?
  - b. What do you dislike about the program?
- 5. Tell me about your leisure and recreation activities before the stroke.
- 6. What kind of things do you do now for leisure and recreation?
- 7. How do you think the stroke has impacted your life?
- 8. Discuss why you continue to attend the Club Rec Program
- 9. Have you made friends at the Club Rec Program?
- 10. How has the Club Rec Program changed how you feel about yourself?
  - a. How do you feel about your ability to complete a task now?
- 11. How has your outlook on life changed since your stroke?
- 12. How have relationships with family and friends changed since your stroke
- 13. How do you live your life now compared to before your stroke?
- 14. What things in life are important to you?
- 15. Self efficacy is how you feel about your ability to accomplish a task or do something, and not how good you feel about yourself, tell me about your view of your self efficacy

#### APPENDIX B

#### Consent Form

### **Introduction to the Study:**

- We are inviting you to be in a research study of people participating in a structured recreation therapy program at Sheltering Arms Physical Rehabilitation Hospital.
- As you already know, the Club Rec Program is a structured day recreation program for adults with disabilities
- Cheryl E. Spradlin, CTRS from the University of North Carolina at Chapel Hill Department of Recreation and Leisure Studies is doing this study.

## **Purpose:**

• The purpose of this study is to examine the relationship between recreation therapy and self-efficacy, life satisfaction, and leisure attitude.

## What Will Happen During the Study:

- 1. Cheryl will ask you to complete 2 brief tests that she will read to you.
- 2. These tests may include:
  - Listening to statements about your life and describing them as never true, seldom true, sometimes true, often true or always true
- 3. All three tests should take approximately 20 minutes total.
- 4. Approximately 4-8 weeks later, Cheryl will conduct an interview where she will ask you about your experiences with having a stroke and the club rec program. This interview will be tape recorded. You will have the opportunity to review the interview, and approve its content.
- 5. If we ask you to be in more research later, we will tell you exactly what you would have to do to be in that study, and you would have the chance to decide on your own if you want to be in the new study.

## **Your Privacy is Important:**

- We will make every effort to protect your privacy.
- We will not use your name in any of the information we get from this study or in any of the research reports.
- Any information we get in the study will be recorded with a code number that will let Cheryl Spradlin know who you are.
- All information will be kept in a locked safe until the end of the study
- When the study is finished the key that shows which code number goes with your name will be destroyed.

#### **Risks and Discomforts:**

We do not know of any personal risk or discomfort you will have from being in this study.

### **Your Rights:**

- You decide on your own whether or not you want to be in this study.
- You will not be treated any differently if you decide not to be in the study.
- If you decide to be in the study, you will have the right to stop being in the study at any time.
- If you decide not to be in the study or to stop being in the study, this will not affect the regular services you get from The Sheltering Arms Rehabilitation Hospital Program.

# **Institutional Review Board Approval:**

- The Academic Affairs Institutional Review Board (AA-IRB) at The University of North Carolina at Chapel Hill has approved this study.
- If you have any concerns about **your rights as a participant** in this study, you may contact the AA-IRB at (919) 962-7761 or at aa-irb@unc.edu.
- If you have any questions **about the study** please contact Cheryl Spradlin at 919-593-1866 or cspradli@email.unc.edu

I have had the chance to ask any questions I have about this study, and they have been answered for me.

study. There are two copies of this form. I will kee	U
other to the investigator.	
(Signature of Participant)	(DATE)

## APPENDIX C

## Life Satisfaction Scale

### **Life Satisfaction Scale Assessment**

Participant # Date		
Γest #		
Score	•	
1 I feel just miserab		
	hat I could be as lonely as I am now	
3 I never felt better	•	
	alk to about personal things	
	nds that I'm lonely much of the time	
6 I can no longer do		
7 This is the most u		
	ime that I know how to use	
9 I do better work the		
10 I haven't a cent in		
11 I have no use for a		
12 I am just as happy		
13 Sometimes I feel	•	
	g now that my life isn't very useful	
15 My life is full of v		
16 This is the drearie	st time of my life	
17 My life is still bus		
18 I like being the ag	ge I am	
19 I seem to have les		
20Most of the things	I do are boring or monotonous	
21 I often feel lonely		
22. Compared to othe	r people, I get down in the dumps too often	
23 Things keep getting	ng worse as I get older	
24 These are the best 25 I have a lot to be s	years of my life	
25 I have a lot to be s	sad about	
26 I sometimes worr	y so much that I can't sleep	
27 I am as happy nov	v as I ever was	
28 I feel old and som	ewhat tired	
29 The older I get, th	e worse everything is	
30 My life could be l	nappier than it is now	
31 Life is hard for me	e most of the time	

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#### APPENDIX D

#### Leisure Attitude Measurement

Participant #	1 = disagree strongly
Date	2 = disagree somewhat/moderately
Test #	3 = neither agree nor disagree
Score	4 = agree somewhat/moderately
	5 = agree strongly

- 1. Engaging in leisure activities is a wise use of time
- 2. Leisure activities are beneficial to individuals and society
- 3. People often develop friendships in their leisure
- 4. Leisure activities contribute to one's health
- 5. Leisure activities increase one's happiness
- 6. Leisure increases one's work productivity
- 7. Leisure activities help to renew one's energy
- 8. Leisure activities can be a means for self-improvement
- 9. Leisure activities help individuals to relax
- 10. People need leisure activities
- 11.Leisure activities are good opportunities for social contacts
- 12. Leisure activities are important
- 13. When I am engaged in leisure activities, the time flies
- 14.My leisure activities give me pleasure
- 15.I value my leisure activities
- 16.I can be myself during my leisure
- 17.My leisure activities provide me with delightful experiences
- 18.I feel that leisure is good for me
- 19.I like to take my time while I am engaged in leisure activities
- 20.My leisure activities are refreshing
- 21.I consider it appropriate to engage in leisure activities frequently
- 22.I feel that the time I spend on leisure activities is not waster
- 23.I like my leisure activities
- 24. My leisure activities absorb or get my full attention
- 25.I do leisure activities frequently
- 26. Given a choice I would increase the amount of time I spend in leisure activities
- 27.I buy goods and equipment to use in my leisure activities as my income allows

- 28.I would do more new leisure activities if I could afford the time and money
- 29.I spend considerable time and effort to be more competent in my leisure activities
- 30. Given a choice I would live in an environment or city which provides for leisure
- 31.I do some leisure activities even when they have not been planned
- 32.I would attend a seminar or a class to be able to do leisure activities better
- 33.I support the idea of increasing my free time to engage in leisure activities
- 34.I engage in leisure activities even when I am busy
- 35.I would spend time in education and preparation for leisure activities
- 36.I give my leisure high priority among other activities

# APPENDIX E

# Self-Efficacy Scale

### **Self-Efficacy Scale Assessment**

Participant #	1 = disagree strongly
Date Γest #	2 = disagree somewhat/moderately
	3 = neither agree nor disagree
Score	4 = agree somewhat/moderately
	5 = agree strongly
1 I like to grow house	-
	I am certain I can make them work
	s is that I cannot get down to work when I should
	e first time, I keep trying until I can
	najor role in determining one's personality
6 It is difficult for me	
	nt goals for myself, I rarely achieve them
8 I give up on things l	pefore completing them
9 I like to cook	
	yould like to meet, I go to that person instead of waiting
for him or her to come to	
11 I avoid facing diffic	
	too complicated, I will not even bother to try it
13 There is some good	
	nteresting who is very hard to make friends with, I'll soon
stop trying to make frier	=
	ning unpleasant to do, I stick with it until I finish it
	something, I go right to work on it
17 I like science	
, , , , , , , , , , , , , , , , , , ,	n something new, I soon give up if I am not initially
successful	
	become friends with someone who seems uninterested at
first, I don't give up ver	•
	roblems occur, I don't handle them very well
21 If I were an artist, I	
22 I avoid trying to lea	rn new things when they look too difficult for me
23 Failure just makes n	· · · · · ·
24 I do not handle mys	
25 I very much like to	
26 I feel insecure about	
27 I am a self-reliant po	
	friends though my personal abilities at making friends
29 I give up easily	

30 I do not seem capable of dealing with most problems that come up in my life.

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