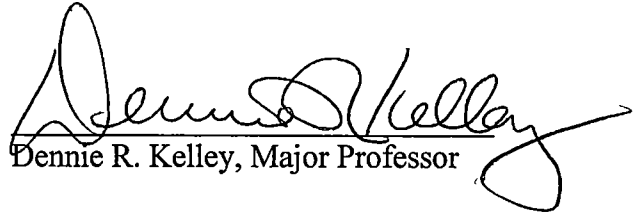
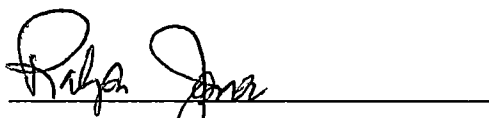


To the Graduate Council:

I am submitting herewith a thesis written by June Marie Doyle entitled "Recreation Participation and Leadership Roles: Both as Undergraduates and Five Years After Graduation." I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Human Performance and Sport Studies


Dennie R. Kelley, Major Professor

We have read this thesis
and recommend its acceptance:


Accepted for the Council:


Associate Vice Chancellor and
Dean of the Graduate School

**RECREATION PARTICIPATION AND LEADERSHIP
ROLES: BOTH AS UNDERGRADUATES AND
FIVE YEARS AFTER GRADUATION**

**A Thesis
Presented for the
Master of Science
Degree
The University of Tennessee, Knoxville**

**June Marie Doyle
May 2000**

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DEDICATION

This thesis is dedicated to my daughters

Jennifer and Allison

I want to thank them for their emotional support and encouragement
to persevere

ACKNOWLEDGEMENTS

I wish to take this opportunity express my sincere gratitude and appreciation to many people for their assistance in the preparation and completion of this thesis. In particular I would like to thank my committee chairperson Dr. Dennie Kelley for her generous time and expertise and for keeping the channels of communication open in this laborious process. I would also like to express my sincere thanks to my committee members Dr. Buck Jones, Dr. Bruce Ralston, and especially to committee member Harold Denton and the RecSports Department for sponsoring my thesis. Last but not least thanks to my family and friends for their continued encouragement including my mentor, Dr. Gary Rizzo.

ABSTRACT

While performing a practicum with the Department of Recreation at the University of Tennessee, Knoxville, the author of this study was interested in what motivated students to use the Recreation Department's facilities. A departmental questionnaire was administered to facility users as part of the practicum. The findings of the questionnaire listed the primary motivation for working out as a desire to improve one's physical fitness.

As a continuation of the practicum study, this thesis used a questionnaire to determine the relationship between the level of recreation participation of undergraduates according to their school year and again five years after they graduate. This study also examines the primary motivations for participating in recreation and whether gender affects the leadership roles of both undergraduates and five years after they graduate. Did the fact that students participated in physical recreation while they were in college make them more likely to participate in physical recreation several years after graduating? Or are more adults participating in recreation now than were participating as students? Is physical fitness the primary motivation of the subjects studied for participation in recreation at both age increments?

A one-page questionnaire was used as the evaluative instrument. The questionnaire was mailed to students who graduated as undergraduates from the University of Tennessee, Knoxville five years ago.

Results of the study were consistent with much of the review of literature. Resident students participated in recreation more than commuters did. A statistically

significant relationship existed between gender and both undergraduate recreation participation and leadership roles at both age increments. Students did not perceive that whether they had an undergraduate recreation experience effected their present day recreation habits although an overwhelming majority of those who participated in recreation as undergraduates are currently participating.

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CHAPTER I

Introduction

To date, research suggests that there is some continuity in leisure behavior over time (Mannell & Kleiher, 1997). Few studies have been performed to measure this continuity over the lifespan and at what age group this transference is more successful and to what extent. Knowing this information would enable recreation practitioners to concentrate on a specific age group in order to emphasize the development of a pattern of physical recreation.

According to Sofranko and Nolan (1972), Spreitzer and Snyder (1976); and Yoesting and Burkhead (1973), patterns of health related behaviors are acquired and established during childhood and adolescence. Although several studies have concluded that youthful activities are reflected in adult leisure choices, Kelly (1974) few studies have examined whether college-aged recreation participation is carried over to the years following graduation. The purpose of this study is to determine the relationship between the level of recreation participation of undergraduates according to their school year and again five years after they graduate. This study also examines the primary motivations for participating in recreation, and whether gender affects the leadership roles of both undergraduates and five years after they graduate. Did students develop physical recreation habits and leadership roles that they would continue after they graduated from college? The findings should lend some insight into whether recreation habits developed as undergraduate students act as a reinforcement for life-long recreation behavior. Masaron and Denolin (1985) identified the average age of the entering college student

(18 years) as the beginning of a critical period that dictates whether an individual will lead a physically active or inactive lifestyle in subsequent years. Although according to Moore, Lowell, McGann, and Wyrick (1998) fewer students are the traditional 18-22 year olds, Masaron and Denolin's idea should still be relative. Regardless of the outcome of this study, more research is needed on whether a relationship exists between the physical recreation practiced while in college and the level of physical recreation during the years following graduation at various increments during the life span

The idea has been presented before that in order to maintain a physical recreation regime, one must first be exposed to the activity and then maintain the activity long enough for it to become a habit. Exposing individuals to more appropriate activities may encourage lifelong involvement in sport and recreation (Parr & Oslin, 1998). The college campus is an ideal arena for exposing students to available, inexpensive, and conveniently located recreation programs. This study will try to determine if four years of exposure to easily accessible recreation as undergraduate students is long enough to develop recreation habits that last after graduation and into adulthood

Purpose of the Study

The purpose of this study is to determine the relationship between the level of recreation participation of undergraduates according to their school year and again five years after they graduate. This study also examines the primary motivations for participating in recreation, and whether gender affects the leadership roles of both undergraduates and five years after they graduate. Did students develop physical recreation habits and leadership roles that they would continue after they graduated from

college? The findings should lend some insight into whether recreation habits developed as undergraduate students act as a reinforcement for life-long recreation behavior. The questions addressed in this study were.

1. Does living on or off campus and your academic year (freshman, sophomore, junior, senior) make a difference in the amount or level of recreation participation?
2. Is there a difference in the level of involvement in recreation based on gender?
3. How much time was and is spent on recreation?
4. What types of recreation activity are most frequented by people as undergraduates and five years after they graduate?
5. What are the motivations for recreation participation before and after graduation?
6. Is there a difference in the number of leadership roles based on gender?

Definition of Terms

The following terms used in this study are defined operationally

Exercise – repetitive bodily movement done to improve or maintain one or more components of physical fitness.

Physical fitness – A set of attributes that people have or achieve that relates to the ability to perform physical activity

Physical activity – Bodily movement that is produced by the contraction of skeletal muscle and that substantially increases energy expenditure

Motivation - the inner drive that makes one act or do something

Primary Motivation - the main or most important motivation

Leadership Role - taking an active part to lead others

Benefit - what is derived from a course of action

Perceived - the way one sees or views something, the way they believe it to be.

Influence - that which motivates a person to act or perform in a particular way

Habit - the repetition of an action that causes it to become customary

Reinforcement - confirms or encourages one's actions

Assumptions of the Study

This study made the following assumptions.

- 1 Participants were a representative sample of the undergraduate class of 1994 of the University of Tennessee, Knoxville
2. The participant's recollection of their physical recreation activities while undergraduate students five years ago is reasonably accurate
- 3 The data gathered from the participants on motivation and influence represents their perceptions
- 4 The participants that responded to the questionnaire did so voluntarily and honestly

Delimitations of the Study

The purpose of this study is to determine the relationship between the level of recreation participation of undergraduates according to their school year and again five years after they graduate. This study also examines the primary motivations for participating in recreation, and whether gender affects the leadership roles of both

undergraduates and five years after they graduate Did students develop physical recreation habits and leadership roles that they would continue after they graduated from college? The findings should lend some insight into whether recreation habits developed as undergraduate students act as a reinforcement for life-long recreation behavior. A period of five years after graduation was decided as a reasonable time span for this study, although it is recognized that similar studies should be conducted at spaced increments of the life span. Other limitations within the study were

1. Student athletes were deleted from the original list of names as much as possible, based on the records kept
2. Subjects had to rely on their memory for the amount of time that they participated in recreation as undergraduates.

Significance of the Study

This study will lend insight into whether the recreation programs that are being offered to undergraduate students at the University of Tennessee, Knoxville are beneficial by contributing to the motivation of alumnae to stay physically active later in life. Most colleges realize that campus recreation facilities play a large role in their attempt to attract and recruit potential students. Perspective students are looking for contemporary recreational facilities. Campuses strive to upgrade their recreation facilities to match those of other campuses. Positive data showing a relationship exists between acquiring and maintaining recreation habits would give justification to the recreation department's budget for building expansion and the addition of new programs.

According to the management of the University of Tennessee RecSports Department, much emphasis is placed on the training and reinforcement of student leadership roles. Information should be obtained from this study which would examine whether gender affects the number of leadership roles of people as undergraduates and five years after graduation

CHAPTER II

Review of Literature

The review of Literature begins by stating the current health conditions of Americans followed by the benefits for developing physical recreation patterns and the need for establishing recreation participation habits which last through the life span, and how schools and colleges can contribute to this process. The literature review also compares the level of recreation participation by commuters and resident students, and examines gender differentiation in leadership roles.

Current Health Conditions of Americans

A Report of the Surgeon General (1996) reported that by incorporating daily moderate amounts of physical activity, Americans could make substantial improvements both to their health and to their quality of life. Currently, enough Americans are not active enough as illustrated by the following facts for each age segment of the population.

Adults

1. More than 60 percent of U.S. adults do not engage in the recommended amount of activity.
2. Approximately 25 percent of U.S. adults are not active at all.
3. Physical inactivity is more common among
 - Women than men.
 - African American and Hispanic adults than whites
 - Older than younger adults
 - Less affluent than more affluent people

Women

1. More than 60 percent of U.S. women do not engage in the recommended amount of physical activity.
2. More than 25 percent of U.S. women are not active at all.

Older Adults

1. The loss of strength and stamina attributed to aging is in part caused by reduced physical activity.
2. Inactivity increases with age. By age 75, about one in three men and one in two women engage in no physical activity

Adolescents and Young Adults

1. Nearly half of American youths aged 12-21 years are not vigorously active on a regular basis
2. About 14 percent of young people report no recent physical activity. Inactivity is more common among females (14%) than males (7%) and among black females (21%) than white females (12%)
3. Participation in all types of physical activity declines strikingly as age or grade in school increases
4. Only 19 percent of all high school students are physically active for 20 minutes or more, five days a week, in physical education classes.
5. Daily enrollment in physical education classes dropped from 42 percent to 25 percent among high school students between 1991 and 1995 (A Report of the Surgeon General, 1996).

The Benefits and Need for Physical Recreation

Experts agree that physical activity should be performed regularly for better health and all ages of both males and females benefit from regular physical activity. Even a modest increase in physical activity can significantly improve a person's health (A Report of the Surgeon General, 1996)

Lower mortality rates for both older and younger adults are associated with higher levels of regular physical activity and even those who practice moderate activity on a regular basis have lower mortality rates than those who are least active. The physiologic effects include the cardiovascular, musculoskeletal, metabolic, endocrine, and immune systems. It also appears according to the Surgeon General's Report, physical activity

may not only relieve symptoms of depression and anxiety but may reduce the risk of developing depression.

The benefits of recreation activity are numerous and vary for each age population. Although women and older adults are reported as participating in less physical activity than other age groups, they are listed as receiving the most benefits from physical exercise. For older adults the benefits include:

- Helps maintain the ability to live independently and reduces the risk of falling and fracturing bones
- Reduces the risk of dying from coronary heart disease and of developing high blood pressure, colon cancer, and diabetes.
- Can help reduce blood pressure in some people with hypertension
- Helps people with chronic, disabling conditions improve their stamina and muscle strength.
- Reduces symptoms of anxiety and depression and fosters improvements in mood and feelings of well being.
- Helps maintain healthy bones, muscles, and joints
- Helps control joint swelling and pain associated with arthritis

The benefits for women are listed as

- Reduces the risk of dying from coronary heart disease and of developing high blood pressure, colon cancer, and diabetes
- Helps maintain healthy bones, muscles, and joints.
- Helps control weight, build lean muscle, and reduce body fat
- Helps control joint swelling and pain associated with arthritis.
- May enhance the effect of estrogen replacement therapy in decreasing bone loss after menopause
- Reduces symptoms of anxiety and depression and fosters improvements in mood and feelings of well being
- Can help reduce blood pressure in some women with hypertension (A Report of the Surgeon General, 1996)

According to the Surgeon General's Report, the benefits derived from physical exercise are far greater than any risks such as the rare occurrence of sudden death or musculoskeletal injuries, both which can result from sedentary people beginning an activity too fast and/or too excessively. If we accept the fact that participation in physical exercise or recreation is of great benefit to Americans of all ages, then making an effort to understand how to promote more active lifestyles is of great importance to the health of this nation (A Report of the Surgeon General, 1996)

Patterns of health related behaviors are acquired and established during childhood and adolescence (Kelder, Perry, & Klepp, 1994). Although many people start a fitness program or begin to participate in recreation on a regular basis, they fail to continue or maintain such a program over time. With the overwhelming evidence of the benefits of recreation participation, a need exists to establish regular patterns of participation that last throughout the life span. In order to maintain a physical recreation regime or establish a pattern of activity, one must first be exposed to the activity and then maintain the activity long enough for it to become a habit. The earlier in life one is exposed to a physical activity, the likelihood is greater of it becoming a habit.

Research to date suggests there is some continuity in behavior over time, but the extent to which leisure behaviors people learn during youth persist in adulthood is less well-known. According to Fern and Willits (1998) theories of social development suggest there is continuity in behavior and that adult patterns are affected by youthful experiences. They examined patterns between adolescent leisure participation in each of 74 activities and involvement in those activities 45 years later. Of the 1,215 subjects, 518 or 43% were males and 697 or 57% were females. In their 1989 study there was a

positive correlation between the types of leisure activities of high school students compared to their leisure activities 37 years later when they were in their fifties. Correlation-regression analysis was used to test the significance of the relationships of involvement in each of the types of leisure in 1947 to the respondent's participation in the corresponding activity in 1992. The statistical interactions of gender and adolescent participation were tested for significance. The study showed that the greater the involvement in a specific type of activity in high school, the more frequent the participation in that same activity later in life. Youth participation rivaled gender, health rating, education, and income as a predictor of leisure involvement. Furthermore, "for all five types of activities used in this study, the relationships of adolescent to adult participation were positive and statistically significant" (Fern & Willits, 1998, p. 4). The findings indicated that youthful leisure involvement continued to have an impact on the leisure participation of the subjects through the later middle years (Fern & Willits, 1998).

In a similar study performed by Yoesting and Burkhead (1973), it was found through the testing of five hypotheses that the level of participation in recreation as a child directly effected adult participation. They compared the recreation practices of 137 adolescents 6-11, 12-17, and again when they were 20 and older with a list of 35 activities. The list of activities from two different times was compared and those activities marked at both times by the subjects were tabulated. A simple regression analysis assuming a linear additive model was performed. Both of the analyses they performed were significant. Among the population they sampled, children that are active in outdoor recreation activities continue to be active as adults and inactive children are

inactive adults (Yoesting & Burkhead, 1973) Their study confirmed that the recreation activities practiced in childhood are an important predictor of adult recreation activities.

“Once a person has acquired experience with an activity, he is more likely to continue as he grows older, than people who do not engage in this activity in their youth” (Outdoor Recreation Resources Review Commission, 1962, p 23) According to Iso-Ahola (1980) recreation and leisure involvement by children is related to adult participation in the way of acquired knowledge, skills, and resources In his continuity theory Atchley (1989) states that adults in their attempt to maintain internal and external structures apply familiar strategies in life, causing some form of continuity

Although several studies have shown that youthful activities are reflected in the leisure choices of adults (Burch, 1969; Buse & Enosh, 1977; Christensen & Yoesting, 1973; 1976, Greendorfer, 1983), it should be noted that these studies have relied on the memories of the participants and have studied only a few types of activities

Only one study that was very outdated was found that held an opposing view The study concluded “adult leisure activities are not highly correlated with those of childhood, childhood participation in leisure activities frequently does not lead to the continuance of them in later years” (Patrick, 1945, p 78)

Schools and Colleges Can Contribute to Establishing Life Long Recreation Participation

Through the need for sport participation among the masses (Lewis, Jones, Lamke, & Dunn, 1998), colleges and universities were frontrunners in the development of sporting pursuits in America (Snyder & Spreitzer, 1978) with recreational sport beginning in 1904 at Cornell University Recreational sports on the college campus have

grown enormously and are multi-faceted. According to Hallinan (1998), university recreation programs serve more students than intercollegiate sports teams. Bucher and Krotee (1993) estimate university recreation programs involve 40% to 80% of the population.

While there are several articles on promoting lifelong physical activity through schools K-12 and communities (Kent, 1997, National Center for Chronic Disease Prevention and Health Promotion, 1997), fewer articles on the college age population were found. Although recent literature emphasizes the benefits of student involvement on campuses (Pascarella & Terenzini, 1991; Astin, 1985) the literature is not specific on which types of student involvement are most beneficial. Webb (1986) believes that student involvement can be increased by participation in campus clubs, organizations and recreation programs, but participation in a broad range of activities is not enough to encourage involvement. Perceived competence and self-determination must be acquired to increase the probability of increasing physical activity (Webb, 1986)

While most of the studies found compared recreation activities as adolescents to those practiced as adults, one study by Pierce, Butterworth, Lynn, O'Shea, and Hammer (1992) looked at the fitness profiles and activity patterns of students entering college. One hundred and fifteen male students and 143 female students from a southeastern university participated in an array of physical fitness assessments. Subjects were surveyed to classify activities to determine representative patterns of physical activity. Of the three classifications of aerobic, recreational, and weight training, it was found that females are more likely than males to participate in aerobics (78% to 34%), and men are more likely to participate in weight training than females (35% to 18%). They found

that men showed greater levels of regular participation in recreational activities (28%) compared to women's levels of participation (12%) They also found the fitness levels of entering college students as discouraging The study concluded that their data supported previous research indicating reduced levels of fitness in young adults that illuminates the need for appropriate fitness-based programs for college students (Pierce, Butterworth, Lynn, O'Shea, & Hammer, 1992)

In summary, "physical educators need to appreciate that they have an obligation to prepare students for lifelong involvement in physical activity" (Parr & Oslin, 1998, p.2) According to Parr and Oslin (1998) physical education in secondary schools fails to promote lifelong involvement in physical activity. This view that the physical education currently being taught in schools is failing to promote lifelong involvement is illustrated by the 1996 report from the Surgeon General showing a decline in physical activity for adolescents aged 12 to 21. This view is also supported by Pierce, Butterworth, Lynn, O'Shea, and Hammer (1992) whose data supported previous research indicating reduced levels of fitness in young adults. "Comprehensive school health programs have the potential to slow this age-related decline in physical activity and help students establish lifelong, healthy physical activity patterns" (National Center for Chronic Disease Prevention and Health Promotion, 1997, p. 1) Schools and universities need to encourage daily, quality physical activity as an important part of an inclusive education (A report of the Surgeon General, 1996)

Participation by Commuter Students

Banning and Hughes (1986) describe the resident student as dependent, young, and full time while the commuting student has the tendency to be independent, older, and part time. The environment of commuters varies depending on their distance from the campus, if they are employed outside the college, and their living arrangements and relationships. All of these factors play a role in alienating commuters from the campus culture. Commuters on campus are usually restricted by time, parking conditions, and transportation costs, among other things and most of their time on campus is spent in the classroom. This environment sets up a challenge for presenting information and providing programming to commuter students. According to Astin (1978); Chickering (1974), and Welty (1976) commuter students are less involved in campus activities, less knowledgeable of available programs, less satisfied with their campus experience, and more likely to quit school than resident students.

Foster, Sedlacek, and Hardwick (1977) surveyed 407 undergraduates on their needs, interests, and use of recreation facilities. Using analysis of variance, Newman Keuls post hoc tests, and Chi square at the .05 level, results showed that resident students engaged in almost twice as many recreational activities, were more informed about recreational opportunities on campus, and were more likely to feel that their recreation needs were being met by the campus recreation facilities. The concern that commuters are not getting their fair share of campus recreational services is widespread. The study concluded that differences between resident and commuter students do exist in the use of campus recreation facilities.

Moore, Lovell, McGann, and Wyrick (1998) support the recommendation for student affairs administrators to look beyond the "traditional" students and not make unfounded assumptions about the "non-traditional" students. When distributing information to adult and commuter students about recreation programs, student affairs professionals cannot assume that word-of mouth will be enough; other methods of communication need to be utilized.

Although many studies state the value of involving commuter students, Wilmes and Quade (1986) question if it is even possible to provide programming for commuters due to their diversity as a group. They can be any age, live nearby or far away, be a part time or full time student, working part time or full time, and have more family obligations than resident students. Even if a program does attract the commuter, their attendance may be preempted by more urgent demands (Wilmes & Quade, 1986).

Gender Differentiation in Leadership

Many women put their relationships and the care of others before themselves. As the numbers in this study show, a larger percentage of women do not participate in recreation activities as compared to men at the undergraduate level. Many women feel they have too many demands being placed on them and do not feel they are entitled to leisure (Henderson & Bialeschki, 1991), while men think of recreation as a right and freely participate in recreation activities (Larson & Richards, 1994). This same stereotyping that effects recreation participation in undergraduates can effect women as leaders both recreationally and professionally. However Megargee (1969), Webber

(1976), and Mamola (1979) suggested that women contributed to this stereotyping by being reluctant to assume leadership roles.

In a study performed by Hallinan (1998) college student recreation programs assessed the level of female leadership. Program directors from 13 universities provided job descriptions, the number of positions for each job, the number of women and men employed in each position, and the role qualities for each position. The results from 12 programs with a combined workforce of 514 females and 795 males showed that women are underrepresented as field supervisors (32%) and officials (25%) and overrepresented at stereotypical positions such as aerobics instructors (93%), and desk attendants (66%). Of the 1,309 job categories used in the study, slightly more than half were available as intramural officials (55.38%), yet 75% of these were held by men (Hallinan, 1998). The inventory used for analysis of constructs associated with each job category was adapted from the Bem Sex Role Inventory.

Intercollegiate sport administration is showing a reduction in the number of women who coach and administer girls' interscholastic and women's intercollegiate sports. While 1972 listed female coaches at 90%, only 48% of the coaches in 1993 were female (Shaw, 1995). The percentages of females in administrative positions in athletic departments are more dramatic, declining from over 90% in 1972 to under 16% in 1990 (Shaw, 1995).

Kushell and Newton (1986) studied how gender and leadership style influence subordinate satisfaction and how subordinates accept women. One hundred and forty four subjects were randomly selected from the University of Tennessee, Knoxville and assigned to one of four experimental groups (1) male autocratically led groups, (2) female

autocratically led groups, (3) male democratically led groups, and (4) female democratically led groups. Each group session contained three male and three female subjects, and a male or female group leader. Six sessions were run for each of the four groups. The leaders administered the NASA Moon Landing exercise, ranking items according to relative importance for the need to survive after a crash landing on the moon. Autocratic leaders allowed minimal group discussion and group decision making while democratic leaders allowed lengthy group discussion and encouraged group decision making. The subjects then ranked their reaction to the leaders using a questionnaire with a Likert-type scale.

The results, performing a three-way ANOVA indicated the subjects did perceive their leaders' behavior as differing along the intended autocratic-democratic dimension and these perceptions were not significantly influenced by either the leaders' or the subjects' gender. When examining leader satisfaction they received the expected result that people tend to be more satisfied with the leader when the group is democratic ($F = 44.3, p < .001$), but female subjects are more satisfied with the leader than males in democratic groups and more dissatisfied with the leader than males in autocratic groups. Autocratic leaders were perceived more negatively than democratic leaders, significantly so among female subjects. The leadership style, rather than gender, is the significant determinant of subject satisfaction, especially among female subjects (Kushell & Newton, 1986). This study found that leadership style and gender of the subordinate are more influential sources of satisfaction than gender of the leader. South, Markham, Bonjean, and Corder (1987) found that both men and women get less support from their opposite sex co-workers. Although Denmark (1980) found that females inflicted

sanctions on their female leaders, this study suggests that this will be less likely to happen if the female is more democratic in her leadership style

Other studies found the opposite to be true. Nemeth, Endicott, and Wachtler (1976) found that males were perceived by other group members as more independent, rational, confident, and influential than females and males were viewed as leaders more often. Greene, Morrison, and Tischler (1981) found that female co-leaders were not as highly respected even when they were invested with more formal authority while Morrison and Stein (1985) reported that female trainers were perceived as least competent and least potent even though they had more experience than their male counterparts. Cann and Siegfried (1987) found overwhelming preference for non-sex-typed qualities when rating a boss or a person they would hire to supervise, but the same subjects overwhelmingly indicated (82%), they would prefer a male to a female supervisor.

Summary

Most of the studies and articles reviewed in this literature review were in consensus regarding the topics covered. The American public does need to participate more in recreation at all age increments for better health but the numbers show that they are not doing so. Adolescent participation in recreation does effect adult recreation participation. The level of participation in recreation as a child directly effects adult participation (Fern & Willits, 1989, Yoesting & Burkhead, 1973). Involvement on campuses is beneficial to students, but the exact type of student involvement is not clarified (Pascarella & Terenzini, 1991, Astin, 1985). Schools have the potential to help

students establish lifelong, healthy physical activity patterns (National Center for Chronic Disease Prevention and Health Promotion, 1996) Commuter students are less apt to participate in campus programs including recreation (Chickering, 1974)

Where the literature review differed the most widely was on gender differentiation in leadership Women are under represented in leadership positions in college recreation programs (Hallinan, 1998), and males are viewed as leaders more often than women (Nemeth, Endicott, & Wachtler, 1976). However, Kushell and Newton (1986) found that leadership style, rather than gender, is the significant determinant of subject satisfaction and Cann and Siegfried (1987) found overwhelming preference for non-sex-typed qualities when rating a boss or a person their subjects would hire to supervise.

CHAPTER III

Methodology

The purpose of this study is to determine the relationship between the level of recreation participation of undergraduates according to their school year and again five years after they graduate. This study also examines the primary motivations for participating in recreation, and whether gender affects the leadership roles of both undergraduates and five years after they graduate. Did students develop physical recreation habits and leadership roles that they would continue after they graduated from college? The findings should lend some insight into whether recreation habits developed as undergraduate students act as reinforcement for life-long recreation behavior. A one-page questionnaire was used as the evaluative instrument to obtain this information. This chapter describes the process developed to select the subjects, the questionnaire, and the procedures for gathering the data.

Subjects

The requirements for Human Subject Study set by the University of Tennessee were adhered to. Subjects were randomly chosen by computer from the list held by the Alumni Office of the graduation class of 1994 from University of Tennessee, Knoxville. Four hundred alumni were chosen from a graduating class of approximately 3,700. The list of 400 graduates was reviewed by a staff member from the Athletic Department to delete known college athletes. It was the general consensus that athletes had little or no time to participate in physical activities for purely recreational reasons. Of the 400 names chosen by the computer, several names of athletes were omitted. Of the remaining

names, 300 were mailed questionnaires. The number of subjects chosen was based on the average return rate of 30% and the number needed to achieve a statistically reliable study. One hundred and fifty-seven questionnaires were mailed to females leaving 143 being sent to males. Almost all of the 50 states were represented along with the countries of Spain, England, and the Bahamas.

The class of 1994 has been out of school for five years. The subjects chosen consented to be included in the study by completing and returning the questionnaire. Of the 300 questionnaires mailed, 91 or 32% were completed and returned. Of the 91 questionnaires returned, 50 were females, 40 were males, and one person did not identify their gender. Another 25 unopened envelopes were returned for lack of a forwarding address.

Questionnaire

The questionnaire included yes/no, check all that apply, identify, and open-ended questions. The questionnaire was divided into two sections. The first section was titled Part I - Undergraduate Participation. The second section was labeled Part II - Present Day Participation.

Questions two, three, and four in Part I of the questionnaire answered Research Question One; does living on or off campus and your academic year (Freshman, Sophomore, Junior, Senior) make a difference in the amount or level of recreation participation. The second question on the questionnaire asked respondents to check off the years they lived on campus (Freshman, Sophomore, Junior, Senior). The third question asked whether they participated in recreation as an undergraduate. If

respondents answered no to participating in recreation as undergraduates, they were directed to skip the rest of the questions in Part I and proceed to Part II. If they answered yes to question three, question four asked which years (Freshman, Sophomore, Junior, Senior) they participated in recreation. The data from these questions determines if a relationship exists between resident students and commuters and the level of recreation participation.

Research Question Two, is there a difference in the level of involvement in recreation based on gender, referred to question one that identified gender. It also used the results of questions three and four again and question 14 of Part II which asked if they currently participate in fitness activities, sports, or physical recreation.

The data from questions seven and 16 which asked how many hours per week were and are, spent on recreation, answered Research Question Three, how much time was and is spent on recreation.

Research Question Four, what types of recreation activity are most frequented by undergraduates and five years after they graduate, used questions five, six and 15 which asked respondents to identify their recreation activities. The data from these questions will be summarized in a table to examine any similarities.

Motivations for recreation, which was Research Question Five, was answered by questions eight and nine for undergraduates and 17 and 18 for present day participation. Respondents were asked to check off their motivations for participation and then to write in their primary motivation. These questions investigate if motivations for participation are different at different age levels and if some motivations are stronger and more enduring over the life span.

Research Question Six examined gender and leadership roles. Question one identified gender and questions 12 and 19 asked respondents to identify their leadership roles/s. For undergraduate participation, respondents are asked to identify their leadership role. For present day participation, respondents are asked to check if they are in a leadership role either in their profession or community.

Other questions were included on the survey, which did not directly respond to the research questions, but were of interest either to the recreation department, or to the author of the study. In Part I, question ten asked respondents to rate their undergraduate recreation experience from 1 to 5 with 1 being poor and 5 being excellent. Question 11 then asked what they would have changed or added to their recreation experience as a student. This information might aid the recreation department in the planning of their facilities, hours, programs, and rules. Another question included in Part I asked those who identified a leadership role to write in the perceived benefits derived from that role.

Other questions in Part II were questions 20 and 21. Respondents were asked if they thought that participating in recreation as an undergraduate influenced whether they currently participate or if they thought that *not* participating in recreation as an undergraduate influenced whether they currently participate. These two questions again look at what influences and motivates people to, or not to, participate in recreation.

Rationale

A questionnaire was chosen over other information gathering techniques as an attempt to contact more students, in order to receive an adequate number of returns for statistical purposes. The questionnaire was mailed with a cover letter. The cover letter

was printed on the official letterhead of the RecSports Department of the University of Tennessee, Knoxville since they sponsored the mailing and this helped to add to the validity of the study. The cover letter explained the study was being completed for a Thesis project and requested their assistance in completing and returning the questionnaire in the enclosed stamped return envelope. A specified date of return was stated in the letter. The return envelope had the address of the Department of Recreation but had my name on it in order to preserve confidentiality by not having anyone else open it. Once the data collection ended, the surveys were assigned a number and the results were entered into the computer.

CHAPTER IV

Findings

The purpose of this study is to determine the relationship between the level of recreation participation of undergraduates according to their school year and again five years after they graduate. This study also examines the primary motivations for participating in recreation, and whether gender affects the leadership roles of both undergraduates and five years after they graduate. A questionnaire was developed and mailed to 300 graduates of the 1994 class of the University of Tennessee, Knoxville. A total of 91 or 32% completed questionnaires were returned.

Demographics

A total of 91 subjects returned questionnaires. However, not all questions were answered by everyone. The total number of respondents to each question varied by one or two people. Of the 91 questionnaires returned, 50 were female, 40 were male, and one person did not indicate their gender.

Research Question 1. Does living on or off campus and your academic year (Freshman, Sophomore, Junior, Senior) make a difference in the amount or level of recreation participation?

Since campus recreation sites and equipment is much more readily accessible for students living on campus, this question explores to see if a difference exists in the level of recreation participation.

Results

Of the 91 respondents that answered this question, 39 or 72.2% lived on campus as freshmen and participated in recreation (Table 1) versus the 15 students that lived on campus and did not participate in recreation. The results of a chi-square show that a statistically significant relationship exists ($p < .000$). Of the 37 freshmen that did not live on campus, 30 did not participate in recreation.

Thirty-two or 72.7% of the 91 respondents lived on campus as sophomores and participated in recreation while 12 students who lived on campus did not participate (Table 2). A chi-square shows us that a statistically significant relationship exists ($p < .001$) between living on campus as sophomores and participating in recreation. Of the 47 sophomores that did not live on campus, only 18 of them participated in recreation.

A chi-square showed that a relationship did not exist for juniors and seniors that participated in recreation whether they lived on or off campus. Overall, 49 juniors participated and 41 seniors participated.

Research Question 2. Is there a difference in the level of involvement in recreation based on gender?

This question looks at both undergraduate and current levels of recreation based on gender. Looking at undergraduate gender participation and comparing it to current gender participation is an attempt to discover if the college campus encourages equal gender participation.

Results

Eighty-nine subjects answered this question, 50 females and 39 males. The results of a chi-square test show there is a significant relationship ($p < .006$) between gender

Table 1. College Freshman Participation and Residence Status

			Freshman Participate in recreation		Total
			Yes	No	
Freshman Lived on Campus	Yes	Count	39	15	54
		% within Freshman Lived on Campus	72.2%	27.8%	100.0%
	No	Count	7	30	37
		% within Freshman Lived on Campus	18.9%	81.1%	100.0%
Total	Count		46	45	91
	% within Freshman Lived on Campus		50.5%	49.5%	100.0%

Pearson Chi-Square = 24.956, df = 1, p < .001

Table 2. College Sophomore Participation and Residence Status

			Sophomore Participate in recreation		Total
			Yes	No	
Sophomore Live on campus	Yes	Count	32	12	44
		% within Sophomore Live on campus	72.7%	27.3%	100.0%
	No	Count	18	29	47
		% within Sophomore Live on campus	38.3%	61.7%	100.0%
Total	Count		50	41	91
	% within Sophomore Live on campus		54.9%	45.1%	100.0%

Pearson Chi-Square = 10.882, df = 1, p = .001

and recreation participation for undergraduates (Table 3). Of the respondents, 24 or 48% of the females participated in recreation as undergraduates compared to 30 or 76.9% of the males. However, the results of a chi-square test show there is no statistically significant relationship based on gender of current recreation participation. Overall, of the 90 respondents to this question, 78 currently participate in some form of recreation. Of the respondents, there appears to be a larger number or percentage currently participating in recreation; 78 out of 89 respondents compared to the undergraduate participation of 54 out of 90 respondents.

Research Question 3. How much time was and is spent on recreation?

Results

Undergraduate hours spent on recreation show an equal amount of average time spent on fitness activities and team sports with an average of 4.8 hours a week for each (Figure 1). This question was not separated by gender. The total hours for fitness were 37 with 4.81 as the mean. The least amount of time spent on fitness per week by an individual was .5 hours while the most amount of time was 15 hours. However, the total hours spent on outdoor recreation were greater than the total time spent on team participation. The total hours for teams were 28 with 4.83 as the mean. The minimum hours listed for teams was one while the maximum was 20. Hours spent in outdoor recreation were 30 per week with 4.25 the mean. The minimum amount of time was one hour per week while the maximum hours spent outdoors was 10. Indoor hours received 20 a week with a mean of 3.65. One was the minimum and again 10 hours were the

Table 3. Undergraduate Participation by Gender

			Participate in recreation as an undergraduate		Total
			Yes	No	
Gender	Female	Count	24	26	50
		% within Gender	48.0%	52.0%	100.0%
	Male	Count	30	9	39
		% within Gender	76.9%	23.1%	100.0%
Total		Count	54	35	89
		% within Gender	60.7%	39.3%	100.0%

Chi-Square = .006, df = 1, p = .006

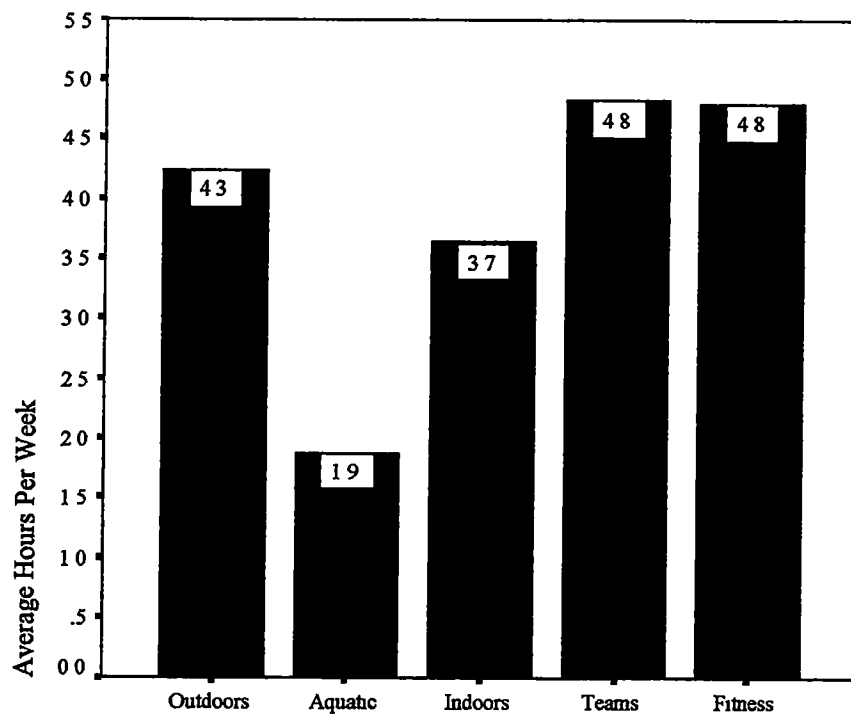


Figure 1. Average Hours Per Week Spent on Recreation as Undergraduates

maximum Aquatic hours received the lowest hours per week of 10, with a mean of 1.9 and a minimum of one hour and a maximum of 10

Present day recreation participation listed fitness activities as receiving the most hours each week with 57 and a mean of 4.26 (Figure 2). The minimum amount of time spent each week was 5 while the maximum was 20 Outdoor activities received the second highest number of hours of 37 with a mean of 3.43. The minimum amount of time spent on outdoor activities was 25 and 10 was the maximum number of hours spent on outdoor activities. Activities that took place indoors received the third highest number of hours of 21 with a mean of 3.47. The highest number of hours spent on indoor activities was eight and the lowest number of hours was one. The number of hours spent on team sports each week was 13 with a mean of 4.0. Team sports had 12 as their highest number of hours and one as the lowest number of hours. Time spent on aquatics received the lowest number again with six hours each week and a mean of 3.66 Aquatic hours had a low of one hour each week and a high of 10 hours.

Research Question 4. What types of recreation activity are most frequented by undergraduates and five years after they graduate?

Structured group activities are a predominate part of any campus recreation department. This question explores if people are more likely to participate in group or team sports while in school compared to after graduation

Results.

The table shows that more undergraduate students were involved in fitness activities, which is usually considered a single rather than a team event (Table 4).

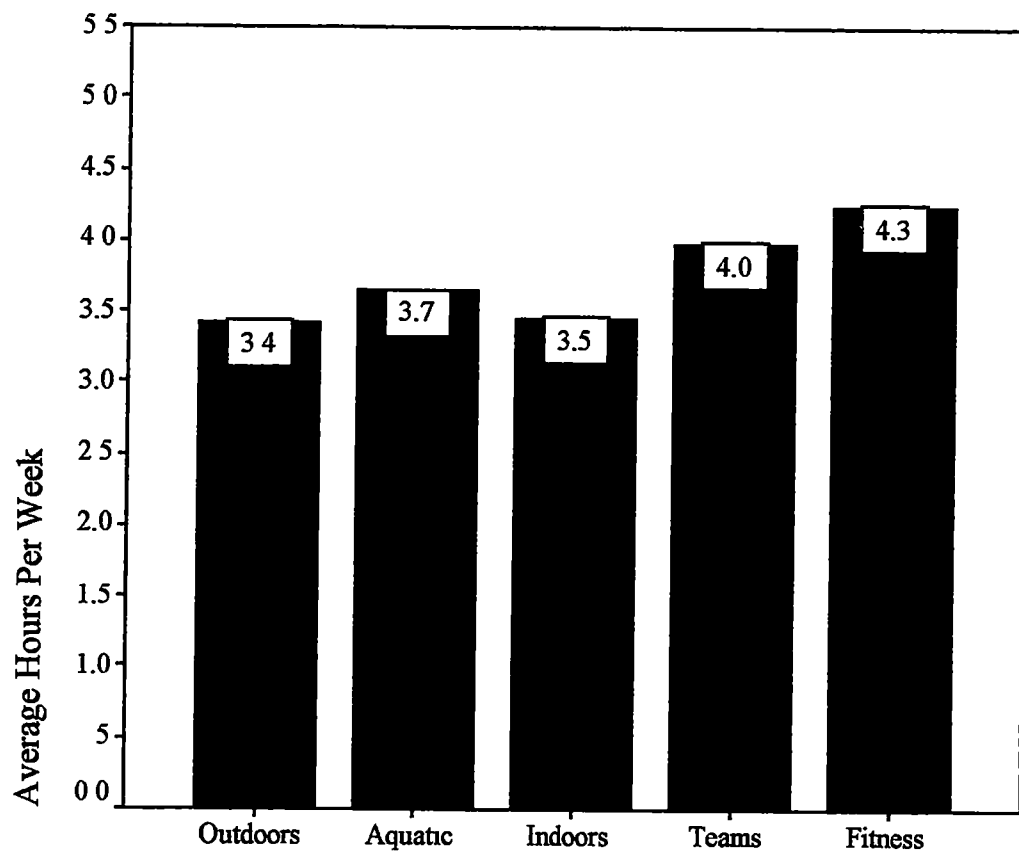


Figure 2. Present Day Average Hours Per Week Spent on Recreation

Table 4. Types of Recreation as Undergraduates

	N	Minimum	Maximum	Mean	Std. Deviation
Outdoors	30	1 00	10 00	4.2500	2 5889
Aquatic	10	1 00	3 00	1 9000	7379
Indoors	20	1 00	10 00	3 6500	2.2070
Team	28	1 00	20 00	4 8393	4 3013
Fitness	37	50	15 00	4 8108	3 0558

Undergraduates were more involved in fitness and recreating outdoors than participation on a team. The same held true for current recreation habits, except there is a greater emphasis on the participation in fitness activities (Table 5) Aquatic recreation had the least amount of participation at both age increments

Research Question 5. What are the motivations for recreation participation before and after graduation?

Respondents were first asked to check off their motivations of the choices listed (to relieve stress, to maintain fitness, to socialize, other) for recreation participation and then write in their primary motivation. In a few instances, after checking off their motivations from those listed, respondents disregarded the list and wrote in their own answer for their primary motivation

Results:

Undergraduates checked their motivations for recreation participation. The category of maintaining fitness received 56% The category to socialize received almost 43%, relieving stress 34%, and the category of other received just over 15%. Written in for the category of other was fun (4), personal enjoyment/satisfaction (3), ROTC/fraternity, self-preservation, classes, to compete, and being on a team

Current motivations for recreation included maintaining fitness with 80%, to relieve stress 59%, to socialize 24%, and the category of other 22% The category of other for current motivations contained a large variety of responses Included in the responses were fun (2), to lose weight (2), personal enjoyment/satisfaction (2), to get out of the house, to improve appearance, environmental activism, to walk with the baby,

Table 5. Present Day Types of Recreation

	N	Minimum	Maximum	Mean	Std. Deviation
Outdoors	37	.25	10 00	3 4392	2 3180
Aquatic	21	1 00	10 00	3 6667	3 2660
Indoors	21	1 00	8 00	3 4762	2 0705
Teams	13	1 00	12 00	4 0000	3 3850
Fitness	57	50	20 00	4 2632	2 8849

necessary yard work, job requirements, army, money, self-preservation, and health maintenance

For primary motivations, undergraduates listed to maintain fitness as first with 26 or 50%, to socialize with 10 or 19.2%, other was nine or 17.3%, and to relieve stress received two responses or 3.8%. The category of all of the choices given received five or 9.6%. The motivations written in for the category of other consisted of fun (3), sorority, intramurals, classes, self-preservation, competition, ROTC/fraternity, and personal enjoyment

Primary motivations for present day participation were first to maintain fitness with 49 or 65.3%, other with 14 or 18.7%, to relieve stress was third with eight or 10.7%, the category all of the above had three and to socialize was fourth with one. Listed as other included enjoyment (2), to lose weight, fun, have become too fat, necessary yard work, walk with the baby, money, job requirements/army, to get out of the house, improve appearance, environmental activism, and self-preservation. The primary motivation for both groups seems to be to maintain fitness, but the category of other for present day participation exhibited many more responses than were listed for undergraduates.

Research Question 6. Is there a difference in leadership roles based on gender?

Subjects were asked to identify if they were in a leadership role in recreation (team captain, etc) as undergraduates and whether they are currently in a leadership role either professionally or in their community

Results:

Performing a chi-square told us there is a statistically significant relationship (002) between males and females performing in a leadership role in recreation as undergraduates (Table 6). Only one female out of 50 or two percent of the female respondents identified herself as being in a leadership role. With male respondents, nine out of 40 or 22.5% identified themselves as being in a leadership role. The leadership role listed by the female was identified as dance team captain, while the male leadership roles were team captain (4), fraternity president, and club officer/instructor.

For present day participation respondents were asked if they are currently in a leadership role either in their profession or community or both. A performed chi-square shows a relationship between genders does exist (006) in professional leadership roles (Table 7). For 50 female respondents, only 18 or 36% state they are in a leadership role in their profession while 26 or 65% of their male counterparts report they are in a leadership role. It can be speculated that males are more likely to be in a leadership role both in recreation and professionally.

A chi-square performed on community leadership roles showed a relationship does not exist. A total of 14.4% of respondents from both genders listed themselves as being in a leadership role in their community, however males held more community leadership roles than females. The questionnaire did not ask for respondents to identify what their professional or community leadership roles were.

Table 6. Undergraduate Leadership Roles Based on Gender

			In a leadership role as undergraduate		Total
			Yes	No	
Gender	Female	Count	1	49	50
		% within Gender	2.0%	98.0%	100.0%
	Male	Count	9	31	40
		% within Gender	22.5%	77.5%	100.0%
Total		Count	10	80	90
		% within Gender	11.1%	88.9%	100.0%

Chi-Square = 9.456, df = 1, p = .002

Table 7. Professional Leadership Roles Based on Gender

			In a leadership role in their profession		Total
			Yes	No	
Gender	Female	Count	18	32	50
		% within Gender	36.0%	64.0%	100.0%
	Male	Count	26	14	40
		% within Gender	65.0%	35.0%	100.0%
Total	Count		44	46	90
	% within Gender		48.9%	51.1%	100.0%

Chi-Square = 7.479, df = 1, p = .006

Results of Other Questions on the Questionnaire

Question 10 of Part I asked respondents to rate their undergraduate recreation experience from 1 to 5 with 1 being poor and 5 being excellent. With 54 responses to this question, it can be concluded that the overall undergraduate recreation experience was very good with a mean of 3.79. Eleven people responded with a 5 or excellent and 22 people rated their experience with a 4. Only one person rated their undergraduate recreation experience with a 1 while only three responded with a 2 and 15 recorded a rating of 3.

Question 11 then asked what respondents would have changed or added to their recreation experience as a student. Of the 51 responses, nine respondents wrote in the word nothing. Seven people wrote they wish they had participated more, while four respondents wish there had been more games and league play. Five people would have liked improved facilities and better equipment with better maintenance. Two people wish they had been on more teams.

The last question in Part I of undergraduate participation asked the benefits derived if you were in a leadership role. The responses included leadership skills, management skills, respect for and from others, teaching skills, motivation skills, learn to manage different personalities, and organization skills. Clearly, the students in leadership roles are aware of the valuable benefits of being in such a role.

Other questions in Part II were questions 20 and 21 which dealt with whether the participants perceived their undergraduate recreation experience in college influenced if they presently participate in recreation. Respondents were asked if they thought that participating in recreation as an undergraduate influenced whether they currently

participate. Thirty-six or 46.8% answered yes they thought undergraduate participation influenced their current day participation while 41 or 53.2% answered no. Asked if they thought that *not* participating in recreation as an undergraduate influenced whether they currently participate, nine or 15% answered yes and 51 or 85% responded no, the fact that they did not participate in recreation during college has no effect on whether they currently participate in recreation.

CHAPTER V

Synopsis

Summary

The purpose of this study is to determine the relationship between the level of recreation participation of undergraduates according to their school year and again five years after they graduate. This study also examines the primary motivations for participating in recreation, and whether gender affects the leadership roles of both undergraduates and five years after they graduate. Does recreation participation as an undergraduate influence participation after graduation by forming a habit or pattern of behavior that acts as a reinforcement for life-long recreation participation. The topics investigated in this study were based on the six questions developed in Chapter I: 1) whether living on or off campus and your academic year (Freshman, Sophomore, Junior, Senior) makes a difference in the amount or level of recreation participation, 2) if gender affects the level of involvement in recreation, 3) the amount of time spent on recreation, both past and present, 4) the types of recreation activity most frequented by people as undergraduates and five years after they graduate, 5) the motivations for recreation participation before and after graduation, and 6) if the number of leadership roles are effected by gender.

A questionnaire was mailed to 300 alumni of the University of Tennessee, Knoxville, class of 1994. Ninety-one people responded by completing and returning a two-part questionnaire containing questions on undergraduate and present day recreation participation.

The review of literature focused on the current health status of Americans, the benefits of recreation participation, the need for colleges to push for student involvement in recreation programs and whether campus residency and gender affect recreation participation.

Of the 91 respondents, almost an equal number of students resided off campus as on campus while they were freshmen, but the majority that lived off campus as freshmen did not participate in recreation. While the subjects were sophomores, less than half resided on campus and the majority of sophomores that lived on campus participated in recreation, while the majority of commuter students did not participate. A statistically significant relationship existed for both the freshmen and sophomore years.

An overwhelming majority of the respondents were commuters during their junior and senior years. Most of the juniors and seniors who lived on campus participated in recreation while not quite half of those that lived off campus participated. Although no statistically significant relationship existed for juniors and seniors, it is evident that resident students participated more in recreation than commuter students their junior and senior years and in fact, for all four years. This conclusion could be expected since recreation facilities are more accessible to resident students and resident students do not have to deal with parking, time restrictions, jobs, and family commitments to the extent commuter students do, as we learned from the review of the literature.

Gender does effect the recreation participation rates of undergraduate students. The results were statistically significant. For unexplained reasons, gender does not effect recreation participation rates after graduation, and in fact, the female participation rate in recreation five years after graduation rose drastically. This could account for the overall

increase in present day recreation participation which was 78 out of the 89 subjects compared to the overall undergraduate participation number of 54 out of 90 subjects.

Respondents noted they spent the most amount of recreation time on fitness both as undergraduates and present day, although the present day total hours spent on fitness were much higher. Both groups spent the second highest number of hours on outdoor recreation. Undergraduates spent more recreation time on teams which would be consistent with the availability of teams on a campus. As expected the total hours spent on teams was the lowest for present day participation. Undergraduates spent the least amount of time on aquatics which was surprising since the pool facilities are so accessible, while present day participation hours on aquatics was third.

Gender affected undergraduate leadership roles as well. Only one female out of 50 responded that she had been in a leadership role in recreation as an undergraduate student. This finding is consistent with the literature reviewed. College personnel should strive to ingratiate females into leadership roles that are equal to their male counterparts.

Professional leadership roles for females after college were higher than the undergraduate rate of one subject, although they were still less than half of the rate for male subjects after college. Surprisingly, community leadership roles also reported males as holding more than twice the roles of women. Society views women as nurturers and as traditionally staying at home to raise the children which might lead one to conclude females would be more active in their community than males, but this was not found to be true.

Students overwhelmingly rated their undergraduate recreation experience as very good. Over half of the students that participated in recreation as an undergraduate rated

their undergraduate experience on a scale of 1 to 5, with a 4 or 5. The number one answer they wrote in on what they would change or add to their undergraduate recreation experience was nothing. The second most received response on what they would change was their wish that they had participated more. Overall the students that participated in recreation as undergraduates were very satisfied. One could conclude that the low number of students participating in recreation are a result of or lack of getting students involved, rather than providing them with a satisfying experience once they become involved. Commuter students and females need to be targeted with information and attractive recreation programs.

Undergraduate motivators for participation were first, to achieve or maintain fitness, followed by the category to socialize, and then to relieve stress. Present day motivations were also to achieve or maintain fitness, followed by the category to relieve stress, and then to socialize. Socialization for students was more important while to relieve stress, probably from employment, increased family commitments, etc. was more important for present day participation.

Conclusions

- 1 Commuter students do not participate in recreation as much as resident students, which agrees with the research.
2. Gender does effect the recreation participation rates of students.
- 3 Gender does effect participation in a leadership role for both age groups.
- 4 While the main motivation for recreation participation for both age

groups was to maintain fitness, students were more likely to participate on teams, most likely due to their availability and the organization of intramural teams by the RecSports department. Socialization as a motivator, was more important for students while relieving stress was a more important motivator for present day participants.

5. Students that participated in recreation were very satisfied with their campus recreation experience, however the participation rates of students were lower than the present day recreation participation rates.

6. The majority of respondents did not think that whether or not they participated in recreation as a student had an effect on whether or not they currently participate. However, all but three of the respondents who participated in recreation as an undergraduate are currently participating.

The results of the study were both consistent with much of the research reviewed and with the outcome I expected

Implications

1. Since most of the respondents either participated in recreation as an undergraduate or are currently participating, it is possible that many of the recipients who were sent a questionnaire were less likely to complete and return the questionnaire if they have never participated in recreation

Further studies need to place an emphasis on getting subjects who do not participate in recreation to take part in the survey

2. The study did not investigate whether the students that participated in

recreation as undergraduates participated in recreation during their adolescence, and whether or not their collegiate recreation experience was a continuance of a recreation regime already established. Further studies should determine if a relationship exists between adolescent and college recreation participation.

3. While this study looks at the relationship between the recreation habits of college students and their recreation habits five years after graduation, a need exists for similar studies that would look to ascertain if a relationship exists between adolescent and college recreation habits and recreation habits during the life span. Studies are needed to tell us if and how recreation habits can be initiated, reinforced, and then maintained over the lifespan.

4. Perform a study to examine the participation rates based on gender for the different recreation activities.

5. Examine in more depth why the undergraduate participation rate for female subjects in recreation and leadership roles is not as great as the rate for undergraduate males.

6. The current recreational sports facilities are small and dispersed in different buildings. A future study should be performed once the new multi-million dollar RecSports facility currently under construction is completed.

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Appendices

Appendix A

Cover Letter to Alumni

Cover Letter to Alumni

September 1, 1999

Dear UTK Alumni:

As a soon-to-be fellow UTK alumnus, I am respectfully requesting your assistance in completing my thesis. Sponsored by RECSports, my thesis is investigating to see if a relationship exists between participation in recreation as an undergraduate student and participation in recreation five years after graduation. This is where you come in, as a graduate of the class of '94.

In order to achieve a statistically reliable study, I need your timely response to the enclosed one-page questionnaire on whether or not you participated in recreation/fitness as an undergraduate or are participating now. Please take a few minutes to enter your responses and return in the stamped, return addressed envelope before September 30, 1999.

I appreciate your assistance in contributing to this study and in facilitating my graduation from the University of Tennessee, Knoxville.

Sincerely,

June M. Doyle
Enc.

Appendix B
Questionnaire to Alumni

RECREATION PARTICIPATION

PART I – UNDERGRADUATE PARTICIPATION

1. Gender _____ Female _____ Male
2. Please ✓ the years you lived on campus. _____ Fresh _____ Soph.
_____ Junior _____ Senior
- 3 Did you participate in recreation as an undergraduate? _____ Yes _____ No If
NO, complete questions 14-21.
4. Which years did you participate? ✓ all that apply _____ Fresh. _____ Soph
_____ Junior _____ Senior
5. In which of the following did you participate? _____ Intramurals
_____ Sports Club _____ Neither
- 6 ✓ the sports areas or activities in which you participated:
_____ Outdoor _____ Aquatics _____ Individual sports _____
Team sports _____ Fitness
7. How many hours per week?
_____ Outdoor _____ Aquatics _____ Individual sports _____
Team sports _____ Fitness
- 8 Which of the following motivated you to participate in recreation? ✓ all that apply.
_____ To Relieve Stress _____ To Maintain Fitness _____ To Socialize
_____ Other(*identify*)
- 9 Which of the above was your primary motivation?

10. Please rate your undergraduate recreation experience from 1 to 5 with 1 being Poor
and 5 being excellent: _____
- 11 What would you have changed or added to your recreation experience as a student?

12. If you were you in a leadership role (team captain, etc), please identify:

_____ N/A _____

13 What were the benefits you derived from your leadership role/s?

PART II – PRESENT DAY PARTICIPATION

14. Do you currently participate in fitness activities, sports, or physical recreation?

_____ Yes _____ No

15. ✓ the sports areas or activities in which you participate:

_____ Outdoor _____ Aquatics _____ Individual sports _____
Team sports _____ Fitness

16 How many hours, on average, per week?

_____ Outdoor _____ Aquatics _____ Individual sports _____
Team sports _____ Fitness

17. Which of the following motivated you to participate in recreation? ✓ all that apply.

_____ To Relieve Stress _____ To Maintain Fitness _____ To Socialize
_____ Other(*identify*)

18 Which of the above is your primary motivation? _____

19. ✓ if you are currently in a leadership role in your _____ profession _____ community

20. Do you think that participating in recreation as an undergraduate influenced whether you currently participate?

_____ Yes _____ No

21 Do you think that **not** participating in recreation as an undergraduate influenced whether you currently participate?

_____ Yes _____ No

(If you need more room to answer any questions, please write on the back of this paper)

THANK YOU for your participation!

VITA

June Marie Doyle was born in Northeast Pennsylvania, one of 12 children. She is a first generation college student. Upon graduating from high school she attended college for a year before she left school, married, and began a family. The family resided in several parts of the country including San Francisco and upstate New York before settling down in the Philadelphia area. It was there, following a divorce that June successfully competed in several track meets and road races on the sub-masters circuit and coached a high school cross country and track team to the schools' first victory. Her older daughter competed on the traveling team for the University of Oregon Ducks while her other daughter received her degree in exercise physiology from James Madison University. Fitness and exercise have always played an important role in the family's daily routine. In the interim, June resumed her undergraduate education at Montgomery County Community College where she received her Associate Degree in General Studies. She then transferred to the Pennsylvania State University at University Park where she graduated with high honors receiving a Bachelor of Science Degree in Recreation and Park Management in the summer of 1997. After working for a year, June entered the Master's program at the University of Tennessee, Knoxville where she earned a Master of Science in Sport Management with a minor in Geography in the spring of 2000.