

DESCRIPTIVE STUDY OF PHYSICAL RECREATION  
ACTIVITY INTERESTS FOR SUMMER SCHOOL  
GRADUATE STUDENTS AT THE  
UNIVERSITY OF WISCONSIN-LA CROSSE

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the Graduate Faculty  
University of Wisconsin-La Crosse

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Science in Education  
College Student Personnel

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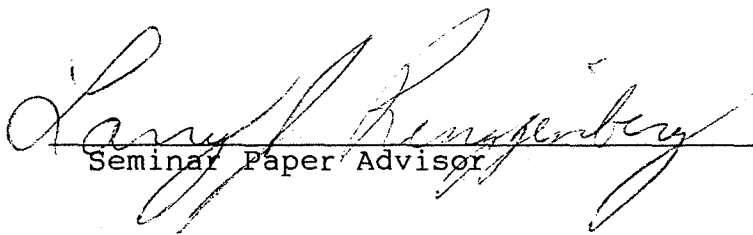
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UNIVERSITY OF WISCONSIN-LA CROSSE  
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I recommend acceptance of this seminar paper in partial fulfillment of this candidate's requirements for the degree MASTER OF SCIENCE IN EDUCATION-COLLEGE STUDENT PERSONNEL

  
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## ABSTRACT

Douglas E. Kuenn: Descriptive Study of Physical Recreation Activity Interests for Summer School Graduate Students at the University of Wisconsin-La Crosse.

The purpose of this study was to design, develop, and administer a recreation interest survey to examine the distribution of summer school graduate students' participation levels in selected physical recreation activities. The instrument used to examine the distribution of summer school graduate students' participation levels in selected physical recreation activities was a researcher-developed survey.

Subjects consisted of 105 University of Wisconsin-La Crosse summer school graduate students.

Responses to each survey item were tabulated and percentages calculated. Results indicated the ten most regularly participated physical recreation activities were walking/jogging, swimming, biking, golfing, dancing, hiking, boating, fishing, volleyball, and weight training. The results also indicated that the ten activities with the highest percentage of graduate students never participating were hang gliding, sky diving, aikido, karate, lacrosse, caving/spelunking, mountaineering, scuba diving, wind surfing, and hackey sack.

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CHAPTER I  
INTRODUCTION

The 1980's have brought in a new generation with interests and needs different from the generation of 60's and 70's. The coming decades will bring in additional generations with more diverse interests and needs. Some of the recreational interests include reading, music arts and crafts, physical activities, and team sports. The focus of this study is on physical recreation activities. The benefits or contributions of recreation have been widely documented. Authorities believe that physical recreation will provide opportunities for: (a) happiness and recognition (Loesch and Wheeler, 1982); (b) enhancing physical health (Kelly, 1980); (c) an increased sense of freedom and development of autonomy (Dowd,1984); (d) relationships with others (Kelly, 1980); (e) entertainment (Iso-Ahola, 1980); (f) and creativity (Loesch and Wheeler, 1982).

Unkel's (1981) findings identify that there is a low carryover potential of team sports throughout the adult life cycle. Therefore, it seems appropriate to investigate what physical recreation activities graduate students participate in.

This study is concerned with gathering information on the physical recreation interests of University of Wisconsin-La Crosse graduate summer school students. The procedure for collecting this information will be through the use of a recreation interest survey.

By conducting this recreational interest survey, descriptive assertions about summer school students recreational interests will be discovered. In the examination of the recreation interests it is a basic principle that adequate demographic information about the population being studied is available. The researcher is not concerned with why the observed distribution of interests in recreational activities occurred, but merely what that distribution is.

#### Educational Significance

Recreation programming is the process of planning and delivering recreational activities to an individual or a group of individuals. Recreational programs or activities can provide experiences for students to enhance their quality of life. Carpenter and Howe (1985) asserted that professionals and volunteers program in order to: increase the students' level of self-awareness, increase awareness about leisure/play attitudes, facilitate problem-solving capabilities, to develop social skills through cooperation and competition, and to encourage growth of knowledge and use of leisure resources. Thus, recreational programmers are educators who program to meet cognitive, psychomotor, and affective needs, thereby enhancing students' total life experience.

Recreational programs must be assessed in terms of the extent to which activities provide satisfaction. This can be obtained by ascertaining the extent to which the activities satisfy certain interests of the participants. If recreation programs do not provide experiences in terms of satisfying interests, participants are not

likely to attend. To assess recreational interests an interest survey may be used.

In recreation programming, interest surveys perform three major functions: the distribution of participation for each of the recreation activities, the generation of program ideas, and the facilitation of responsiveness and input from students by university officials. The desirable end product of involvement in the recreational experience is responsible, independent leisure functioning (Carpenter and Howe, 1985).

#### Statement of the Problem

This study sought to collect baseline data on the recreational interests of University of Wisconsin-La Crosse summer school graduate students. A variety of research on recreational interests has been done through undergraduate and graduate courses. However, no one has attempted to identify the recreational interests of summer school graduate students. This study attempts to fill that research gap.

#### Purpose of the study

The purpose of this study was to design, develop, and implement a recreational interest survey to examine the distribution of summer school graduate students' participation levels in selected physical recreation activities. This study is intended to serve all elements of the university community.

### Research Question

The primary research question for this study is: what is the level of participation of graduate students by sex, age, and marital status in mountaineering, rafting, sky diving, backpacking, biking, camping, sailing, canoeing, kayaking, scuba diving, hiking, caving/spelunking, tubing, hang gliding, fishing, windsurfing, horseback riding, boating/rowing, water skiing, swimming, golfing, tennis, softball, walking/jogging, aerobics, roller skating, weight training, frisbee, soccer, basketball, volleyball, bowling, raquetball, football, ping pong, hackey sack, karate, aikido, badminton, lacrosse, dancing, and billiards.

### Definition of Terms

Before an examination of the study occurs, a clarification of terms is in order. Carpenter and Howe (1985) provide the following definitions:

Interest: An attraction to, or an identification or involvement with some type of activity.

Leisure: Free time, to have time at your disposal that is free from other obligations of living, and/or the idea that it is holistic.

Program: An activity, event, or experience that occurs specifically for its own purposes.

Recreation: The activity that people engage in while in a state of leisure.

Reliability: The degree of consistency that an instrument demonstrates over time and use.

Assumptions and Limitations

The limitations of this study were as follows:

1. It is assumed that the instrument used in this study accurately measured the activity patterns under investigation.
2. The time constraints of this study were such that all research was limited to a two-month period.
3. The research was limited primarily to that literature which was published during the last ten years.
4. The research was limited to literature found in University of Wisconsin-La Crosse's Murphy Library and Mitchell Hall Resource Center.
5. The population used for this study was limited to summer school graduate students at the University of Wisconsin-La Crosse.

## CHAPTER II

### LITERATURE REVIEW

This section provides an overview of selected literature on the following topics: demographic information, recreation program planning, use of recreation interest surveys, participation in physical recreation, and justifications for extracurricular recreation.

After reviewing the literature, the findings seemed to indicate that research has led to an increased emphasis on the human aspects of recreation (Neulinger, 1981). Among these aspects are planning programs for the entire student population, not just the traditional students.

Recent figures from the U.S. Census Bureau indicate that more than one-third of all American college students are 25 years of age or older. The number of college students 25 years of age or older is bound to continue for the indefinite future as colleges and universities seek to recruit nontraditional students to compensate for the declining numbers of 18-22 year olds. By 1992, it is estimated that half of all students will be more than 25 years old and 20 percent will be more than 35 years old (Hodgkinson, 1985). This type of demographic information is essential to consider when making proactive plans focused on meeting the needs of adult students.

Recreational activities that meet the special needs and interests of the adult student is one of the proactive ways colleges and universities attract and retain adult students. Knowles (1984) recommends that in order to provide successful learning encounters,

institutions must change the way they market services and programs, the content of the programs, and the way learning is facilitated.

When considering these changes, educators take advantage of valuable resources and experiences adults bring with them, and empower adult students to be proactive in their life roles (Unkel, 1981). An effective method of planning for the changes suggested by Unkel is via a recreational interest survey.

If recreational programmers identify themselves as human service professionals, they must be committed to ongoing communication with students so that they may provide the best possible service to all students (Carpenter and Howe, 1985). The diary method, the picture sort method, the interview checklist, and the interest survey have all been used to elicit information and increase communication between students and service professionals (Matthews, 1981).

Rather than being concerned with past, present, and future participation in recreational activities, Matthews (1981) suggests investigators of activity participation might determine simply whether a person took part in an activity or not. Scaling the frequency of participation generates internal consistency for data presumed to be of equal intervals.

Matthews (1981) states that the selection of recreational activities to be used on an interest survey must be in congruence with the purpose of the study and must be representative of the geographical area studied. This can be accomplished by first looking at facilities and organizations involved with recreation in a particular area (Komarovsky, Lundberg, and McInerny, 1969).

According to the 1982-83 Nationwide Recreation Survey conducted by U.S. Department of Interior, the number of recreation activities an interest survey can ask about may be limited by factors of cost, respondent attention span, geographical location, and the purpose of the study. The 1982-83 National Recreation Survey selected 36 activities based on the above criteria.

Miller and Prince (1977) argued that as educators we must have concern and commitment for the development of all students. The full potential of all students will not be developed until the psychomotor and affective aspects of their growth are given as much attention as the cognitive dimension. This can be accomplished by participating in physical recreation activities.

A review of the history of recreational sports in the United States prior to 1964 clearly indicates that physical recreation activities, especially competitive sports, have been almost exclusively a male domain (Dulles, 1965). Casual observation, attendance records of public recreation agencies, and scientific research attest that males participate more in physical recreation activities than females (Robinson, 1967).

In recent years the number of females participating in physical recreation activities has increased. An increased emphasis on physical fitness and lifetime sports have altered physical recreation participation patterns significantly. One factor contributing to the altered patterns of participation was the adoption of "Title IX" by school systems (Straub, 1976). Basically, this guaranteed females the opportunity to participate in extracurricular activities.



Presently, relatively little consistent information is available about physical recreation participation in different stages of the life cycle. Hobart (1975) found that young single persons have higher participation rates in physical recreation activities than married counterparts. However, Robinson (1967) reported that no significant relationship exists between participation in physical recreation and marital status where age and level of education are controlled. Reasons for the inconsistencies between findings may be due to the differences of measuring participation and/or the specific activities actually investigated.

One of the main justifications of recreation programming is that it contributes to the total development of the student. The student development approach focuses on the use of the student's out-of-class life for educational purposes (American College Personnel Association, 1975).

Along with an acceptance of the notion of intentional student development (i.e., the application of development theory to the promotion of affective, cognitive, and physical growth of college students) has been an increased interest of educators and counselors in leisure and recreation. Despite the obvious parallel that can be drawn between the use of recreational programs to benefit the individual and student development, the two perspectives have evolved independently and with little cross-fertilization of ideas (Bloland, 1987).

The benefits or contributions of recreation have been widely documented. Authorities believe that recreation will provide opportunities for: (a) happiness and recognition (Loesch and Wheeler,

1982); (b) enhancing physical health (Kelly, 1980); (c) an increased sense of freedom and development of autonomy (Dowd, 1984); (d) relationships with others (Kelly, 1980); (e) entertainment (Iso-Ahola, 1982); (f) and creativity (Loesch and Wheeler, 1982).

A comparison of these benefits or contributions with current psychosocial developmental theories reveals the extent to which recreation theorists and student development theorists are concerned with similar outcomes. Chickering (1969) noted seven developmental vectors that characterize the growth and maturation of college students. Bloland's (1987) research on the relationship between leisure and college students found that at least five of these vectors (achieving competence, becoming autonomous, clarifying purpose, freeing interpersonal relationships, and establishing identity) can be identified as similar or identical to several of the benefits of recreation.

Astin (1984, p.301) stated "the extent to which students can achieve particular developmental goals is a direct function of the time and effort they devote to activities designed to produce those gains." According to Bloland (1987) efforts by educators to assist students in making positive and purposeful recreation choices will result in developmental gains.

## CHAPTER III

### METHOD

The purpose of this study was to examine the distribution of summer school graduate students' participation levels in physical recreation activities. To examine the participation levels, graduate students were given a physical recreation interest survey. The survey for this study was designed to examine what the distribution of interests in physical recreation are for University of Wisconsin-La Crosse summer school graduate students. The following is a discussion of the specific methods and procedures that were adopted to research the problem.

#### Sample and Setting

This study was conducted in cooperation with Student Activities on the University of Wisconsin-La Crosse campus during the 1986-87 summer school session. The population (N=556) was the head count for graduate students during summer school. The researcher randomly selected a sample size of 185, approximately one-third of the graduate student (556) population.

#### Research Design

This project was designed as a descriptive research study to examine what the distribution of participation was for each of the physical recreation activities selected.

This design was utilized because the author was interested in

examining what the participation levels of summer school students are in various physical recreation activities. Due to the fact that descriptive studies present a picture of conditions as they are at the present time, the author believes that the descriptive research design method was an appropriate research design method with which to conduct the required research. According to Gay (1981) a descriptive study which utilizes a survey can very useful in collecting data from members of the population to determine the status of that population with respect to one or more variables.

#### Instrumentation

The instrumentation utilized in this descriptive research study was a two-part, 45 item survey developed by the researcher at the University of Wisconsin-La Crosse in the summer of 1987. The two parts of the instrument were: I - Demographics and II - Physical Recreation Activity Interests.

Because of time restraints the researcher began by calling graduate students from the sample by telephone. A total of 73 graduate students were reached by the telephone and accepted to partake in the survey. To increase the number of responses the remaining 112 graduate students that could not be reached by telephone were sent the survey by mail.

Although the phone survey can provide valuable data, it is a highly subjective technique (Gay, 1985). Gay (1985) recommends the researcher formulate a plan to conduct the phone interview to obtain reasonable objective data. The plan utilized included the following: (a) use the same introduction and directions for each survey, (b) conduct sufficient

practice interviews to acquire needed skills, and (c) remain consistent in the delivery of the interview.

Therefore the following directions were given to the telephone interviewers: (a) Introduce yourself. (b) Ask if you may speak to the graduate student called. (c) If or when the student answers the telephone tell them you are assisting with a research project by Douglas Kuenn to find out what summer school graduate students' physical recreation interests are. Assure the student that responses to this survey will be confidential and the results will be recorded using group data only. (d) Ask the student if they would be willing to participate in the survey. (e) If the student does not want to participate in the interview, thank them for their time. (f) If the student agrees to participate in the interview, follow the survey starting with Part I.

Part I of the research instrument was used to obtain student's demographic data on sex, age, and marital status. These items were used for identifying distributions of participation levels in the activities. Other potential demographic data was not selected because the focus of this study was to identify the distribution of participation levels in physical recreation activities.

Part II of the research instrument was used to obtain data on summer school graduate students' participation levels for each of the physical recreation activities. These activities were selected from the following University of Wisconsin-La Crosse sources: physical education department activity courses, recreation department's activity courses, extended education's physical recreation activities, student activities list of indoor and outdoor recreation activities, and the housing

department's list of physical recreation activities. In addition, the City of La Crosse's Parks and Recreation Department and the U.S. Department of Interior 1982-83 Nationwide Recreation Survey contributed a few activities not mentioned from the above university sources.

The students were asked to rate their level of participation for each activity according to the following scale: A=participate regularly, B=participate occasionally, C=participate rarely, and D=never participate. Definitions of these terms were given to help the students in responding to the activities. The following definitions were used:

(a) regularly: I regularly participate in or spend time on that particular activity; I'm "heavily into this"; (b) occasionally: I occasionally participate in that particular activity; I'm "somewhat into this"; (c) rarely: I have participated in this particular activity once or twice; I'm "not really into this"; (d) never: I have never participated in this activity; I'm "not into this activity at all."

CHAPTER IV  
RESULTS AND DISCUSSION

This chapter contains the results obtained through the development and administration of a researcher-developed recreation interest survey. The primary purpose of this study was to administer a recreation interest survey to examine the distribution of summer school graduate students' participation levels in selected physical recreation activities. Distributions of participation levels were obtained by sex, age, and marital status for 42 physical recreation activities.

A total of 185 University of Wisconsin-La Crosse graduate students were randomly selected for the sample. Of the 185 graduate students randomly selected for the sample, 105 returned the surveys for a return rate of 56.7%. Following are the results that were obtained from the returned 105 University of Wisconsin-La Crosse summer school graduate students' surveys.

Results

The demographic information obtained in the survey consisted of sex, age, and marital status. These 3 variables were used to indicate distributions of participation levels.

Table 1

Sample Demographics

Subjects	Sample Size	Sample Percentage
SEX		
Female	70	67
Male	35	33
AGE		
21-24	15	14
25-29	37	35
30-40	27	26
41 and Over	26	25
MARITAL STATUS		
Single	42	40
Married	63	60

Table 1 identifies the demographic information drawn from items 1-3 of the survey. The results of Table 1 indicated that the majority of graduate students responding were female (67%) and married (60%). The results for age indicated that the greatest percentage of respondents were in the 25-29 year old classification (35%). In addition, 86% of the respondents were over 25 years old.



Table 2

Percentages of Participation Within each Physical Recreation Activity

Activity	Regularly	Occasionally	Rarely	Never
Aerobics	18.1	25.7	23.8	32.4
Aikido	X	X	3.8	96.2
Backpacking	4.8	23.8	21.9	49.5
Badminton	1.9	21.9	37.2	39.0
Basketball	11.4	18.2	31.4	39.0
Biking	29.5	52.4	15.2	2.9
Billiards	3.8	33.4	25.7	37.1
Boating	19.0	34.3	28.6	18.1
Bowling	10.5	37.1	34.3	18.1
Camping	13.3	42.9	29.5	14.3
Canoeing	8.6	36.2	33.3	29.1
Caving/Spelunking	1.0	1.8	6.7	90.5
Dancing	19.0	44.8	26.7	9.5
Fishing	19.0	34.3	24.8	21.9
Football	2.9	15.2	24.8	57.1
Frisbee	4.8	25.7	37.1	32.4
Golf	20.0	27.6	18.1	34.3
Hackey Sack	1.0	3.8	14.2	81.0
Hang Gliding	X	1.0	1.9	97.1
Hiking	19.0	42.9	24.8	13.3
Horseback Riding	1.9	9.5	47.6	41.0
Karate	X	1.0	3.8	95.2
Kayak	1.0	2.9	8.5	87.6
Lacrosse	X	4.8	2.8	92.4
Mountaineering	X	2.9	8.6	88.5
Ping Pong	1.9	16.2	49.5	32.4
Rafting	X	7.6	13.4	79.0
Raquetball	6.7	20.0	18.1	55.2
Roller Skating	X	10.5	40.0	49.5
Sailing	4.8	12.3	21.0	61.9
Scuba Diving	1.0	5.7	6.7	86.6
Sky Diving	X	1.0	1.9	97.0
Soccer	1.9	5.7	17.2	75.2
Softball	13.3	23.8	25.7	37.2
Swimming	35.2	53.3	10.5	1.0
Tennis	12.3	32.4	32.4	22.9
Tubing	4.8	18.1	37.1	40.0
Volleyball	15.2	30.5	26.7	27.6
Walking/Jogging	64.8	24.8	7.5	2.9
Water Skiing	8.6	18.1	38.1	35.2
Weight Training	14.3	21.0	17.1	47.6
Wind Surfing	2.9	4.8	8.5	83.8

The results from Table 2 indicated that the ten activities with the highest percentage of regular participation in rank order were walking/jogging (64.8%), swimming (35.2%), biking (29.5%), golfing (20.0%), dancing (19.0%), hiking (19.0%), boating (19.0%), fishing (19.0%), volleyball (15.2%), and weight training (14.3%). The data also indicated that the ten activities with the highest percentage of students never participating in rank order were hang gliding (97.1%), sky diving (97.0%), aikido (96.2%), karate (95.2%), lacrosse (92.4%), caving/spelunking (90.5%), mountaineering (88.5%), scuba diving (86.6%), wind surfing (83.8%), and hackey sack (81.0%).

Table 3

Percentages of Participation in Aerobics for each Classification within the Variables

<u>Variables</u>	<u>Regularly</u>	<u>Occasionally</u>	<u>Rarely</u>	<u>Never</u>
SEX				
Female	24.3	27.1	20.0	28.6
Male	5.7	27.9	31.4	40.0
AGE				
21-24	13.3	46.7	20.0	20.0
25-29	16.2	21.6	27.0	35.2
30-40	18.5	33.3	25.9	22.3
41 and Over	23.1	11.5	19.2	46.2
MARITAL STATUS				
Single	19.0	23.8	26.2	31.0
Married	17.5	27.0	22.2	33.3

The results from Table 3 indicated that a majority of females (51.4%) participated regularly or occasionally in aerobics. The results also indicated that the majority of students within the 21-24 and 30-40 age classifications participated regularly or occasionally. A majority of single (61%) and married (66.7%) students have participated at least once in aerobics.

Table 4

Percentages of Participation in Aikido for each Classification within  
the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	X	X	4.3	95.7
Male	X	X	2.9	97.1
AGE				
21-24	X	X	13.3	86.7
25-29	X	X	2.7	97.3
30-40	X	X	X	100.0
41 and Over	X	X	3.8	96.2
MARITAL STATUS				
Single	X	X	7.1	92.9
Married	X	X	1.6	98.4

The results from Table 4 indicated that the majority of graduate students within sex, age, and marital status classifications had never participated in aikido.

Table 5

Percentages of Participation in Backpacking for each Classification  
within the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	4.3	20.0	20.0	55.7
Male	5.7	31.4	25.7	31.7
AGE				
21-24	13.3	33.3	20.1	33.3
25-29	5.4	27.1	29.7	37.8
30-40	3.7	22.2	14.8	59.3
41 and Over	X	15.4	19.2	65.4
MARITAL STATUS				
Single	4.8	26.2	28.5	40.5
Married	4.8	22.2	17.5	55.5

The results from Table 5 indicated that the majority of females (55.7%) had never participated in backpacking. The results indicated that (69.3%) of males had participated and that (37.1%) participated occasionally or regularly. The results also indicated that the majority of students within the 21-24 and 25-29 age classifications had participated in backpacking. A majority of single students (59.5%) had participated in backpacking.

Table 6

Percentages of Participation in Badminton for each Classification within the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	2.9	22.9	35.7	38.5
Male	X	20.0	40.0	40.0
AGE				
21-24	X	26.0	26.7	53.3
25-29	2.8	18.9	43.2	35.1
30-40	3.8	29.6	37.0	29.6
41 and Over	X	19.2	34.6	46.2
MARITAL STATUS				
Single	2.4	21.4	31.0	45.2
Married	1.6	22.1	41.3	34.9

The results from Table 6 indicate that a majority of females (61.5%) and males (60%) have participated in badminton. The results also indicated that the majority of students within the 25-29, 30-40, and 41 and over classification have participated at least once in badminton. A majority of single (65.1%) students have participated at least once in badminton.

Table 7

Percentages of Participation in Basketball for each Classification  
within the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	2.9	12.9	32.9	51.3
Male	28.6	28.6	28.6	14.2
AGE				
21-24	20.0	46.7	13.3	20.0
25-29	18.9	18.9	32.4	29.8
30-40	3.7	18.5	37.0	40.8
41 and Over	3.8	X	34.6	61.5
MARITAL STATUS				
Single	14.3	28.6	23.8	33.3
Married	9.5	11.1	36.5	42.9

The results from Table 7 indicated that (57.2%) of the males participated regularly or occasionally in basketball. The results indicated that (66.7%) of 21-24 year old participated regularly or occasionally. The percentage of participation dropped from (80%) at the 21-24 classification to (39.5%) at the 41 and over classification. The percentage of single students (66.7%) participating in basketball was a little higher than married students.

Table 8

Percentages of Participation in Biking for each Classification within  
the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	30.0	55.7	12.9	1.4
Male	28.6	45.7	20.0	57.0
AGE				
21-24	40.0	33.3	20.0	6.7
25-29	29.7	51.4	8.9	X
30-40	29.6	59.3	3.7	7.4
41 and Over	23.1	57.7	19.2	X
MARITAL STATUS				
Single	23.8	40.5	28.6	7.1
Married	33.3	60.3	6.3	X

The results from Table 8 indicated that the majority of graduate students within sex, age, and marital status classifications have participated in biking. Only a small percentage of females (1.4%) and males (5.7%) indicated that they had never participated in biking. The 21-24 year old classification indicated the highest percentage (40% of regularly participating in biking. The percentage of married students regularly or occasionally participating (93.6%) was much higher than singles (64.3%) in biking.



Table 9

Percentages of Participation in Billiards for each Classification within  
the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	2.9	24.1	25.7	47.1
Male	5.7	51.4	25.7	17.2
AGE				
21-24	6.7	46.7	33.3	13.3
25-29	2.7	48.6	18.9	29.8
30-40	3.7	29.6	29.6	37.1
41 and Over	3.8	7.7	26.9	61.6
MARITAL STATUS				
Single	4.8	38.1	31.0	26.1
Married	3.2	30.2	22.2	44.4

The results from Table 9 indicated that a higher percentage of males (82.8%) than females (52.9%) have participated in billiards at least once. The percentage of participation decreased from (86.7%) at the 21-24 year old classification to (38.4%) at the 41 and over classification. The percentage of single students (73.9%) participating in billiards at least once was much higher than married students (55.6%).

Table 10

Percentages of Participation in Boating for each Classification within  
the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	15.7	35.7	30.0	18.6
Male	25.7	31.4	25.7	17.2
AGE				
21-24	20.0	26.7	33.3	20.0
25-29	27.0	32.4	24.3	16.2
30-40	18.5	40.7	25.9	14.9
41 and Over	7.7	34.6	34.6	23.1
MARITAL STATUS				
Single	23.8	35.7	21.4	19.1
Married	15.9	33.3	33.3	17.5

The results from Table 10 indicated that the majority of females (51.5%) and males (57.1%) participated regularly or occasionally in boating. The data also indicated that the majority of 25-29 year olds (59.4%) and 30-40 year olds (59.2%) participated regularly or occasionally in boating. The percentage of single students (23.8%) participating regularly in boating was higher than married students (15.9%).

Table 11

Percentages of Participation in Bowling for each Classification within  
the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	12.9	34.3	31.4	21.4
Male	5.7	42.9	40.0	11.4
AGE				
21-24	6.7	40.0	46.6	6.7
25-29	13.5	48.7	27.0	10.8
30-40	11.1	37.0	37.0	14.9
41 and Over	7.7	19.2	34.6	38.5
MARITAL STATUS				
Single	9.5	35.7	42.9	11.9
Married	11.1	38.1	28.6	22.2

The results from Table 11 indicated the percentage of males (88.6%) participating in bowling at least once was higher than females (78.6%). The percentage of participation decreased from (93.3%) at the 21-24 year old classification to (61.5%) at the 41 and over classification. The percentage of single students (88.1%) participating at least once in bowling was higher than married students (77.8%).

Table 12

Percentages of Participation in Camping for each Classification within the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	12.9	42.9	27.1	17.1
Male	14.3	42.9	34.3	8.6
AGE				
21-24	13.3	33.3	40.1	13.3
25-29	21.6	45.9	21.6	10.8
30-40	11.1	48.2	29.6	11.1
41 and Over	3.8	38.5	34.6	23.1
MARITAL STATUS				
Single	16.7	40.5	35.7	7.1
Married	11.2	44.4	25.4	19.0

The results from Table 12 indicated that the majority of females (55.8%) and males (57.2%) participated regularly or occasionally in camping. The majority of 25-29 year olds (67.5%) and 30-40 year olds (59.3%) participated regularly or occasionally in camping. The majority of both single (57.2%) and married (56.6%) students participated regularly or occasionally in camping.

Table 13

Percentages of Participation in Canoeing for each Classification within the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	7.1	38.6	24.3	30.0
Male	11.5	31.4	51.4	5.7
AGE				
21-24	6.7	40.0	40.0	13.3
25-29	13.5	45.9	27.0	13.5
30-40	7.4	29.6	33.3	29.6
41 and Over	3.8	26.9	38.5	30.8
MARITAL STATUS				
Single	9.5	42.9	28.6	19.0
Married	7.9	31.7	36.6	23.8

The results from Table 13 indicated that (30%) of the females have never participated in canoeing. The majority of 25-29 year olds (59.4%) have participated regularly or occasionally in canoeing. The majority of single students (52.4%) have participated regularly or occasionally in canoeing.

Table 14

Percentages of Participation in Caving/Spelunking for each  
Classification within the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	X	2.9	5.6	91.4
Male	2.9	X	8.6	88.6
AGE				
21-24	6.7	6.7	6.7	79.9
25-29	X	X	8.1	91.9
30-40	X	3.7	11.1	85.2
41 and Over	X	X	X	100.0
MARITAL STATUS				
Single	X	4.8	7.1	88.1
Married	1.6	X	6.3	92.1

The results of Table 14 indicate that for each classification within the variables, the majority of the students never participated in caving/spelunking.

Table 15

Percentages of Participation in Dancing for each Classification within  
the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	20.0	52.9	18.6	8.5
Male	17.1	28.6	42.9	11.4
AGE				
21-24	26.7	20.0	40.0	13.3
25-29	24.3	54.1	16.2	5.4
30-40	18.5	48.1	25.9	7.5
41 and Over	7.7	42.3	34.6	15.4
MARITAL STATUS				
Single	23.8	40.5	26.2	9.5
Married	15.9	47.6	27.0	9.5

The results of Table 15 indicated that the majority of females (72.9%) participated regularly or occasionally in dancing. The majority of 25-29 year olds (78.4%) and 30-40 year olds (66.6%) participated regularly or occasionally in dancing. The majority of single (64.3%) and married (63.5%) students have participated regularly or occasionally in dancing.

Table 16

Percentages of Participation in Fishing for each Classification within  
the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	10.0	35.7	25.7	28.6
Male	37.1	31.4	22.9	8.6
AGE				
21-24	13.3	40.1	33.3	13.3
25-29	18.9	40.6	27.0	13.5
30-40	22.2	37.0	22.2	18.6
41 and Over	19.2	19.2	19.2	42.4
MARITAL STATUS				
Single	14.3	45.2	28.6	11.9
Married	22.2	27.0	22.2	28.6

The results of Table 16 indicated that the majority of males (68.5%) participated regularly or occasionally in fishing. The majority of 21-24 year olds (53.4%) 25-29 year olds (59.5%), and 30-40 year olds (59.2%) participated regularly or occasionally in fishing. The majority of single students (59.5%) participated regularly or occasionally in fishing.



Table 17

Percentages of Participation in Football for each Classification within the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	1.4	8.6	17.1	72.9
Male	5.7	28.6	40.0	25.7
AGE				
21-24	13.3	20.1	33.3	33.3
25-29	2.7	18.9	27.0	51.4
30-40	X	14.8	29.6	55.6
41 and Over	X	7.7	11.5	80.8
MARITAL STATUS				
Single	7.1	19.0	33.3	40.6
Married	X	12.7	19.0	68.3

The results of Table 17 indicated that (72.9%) of females have never participated in football. The majority of 25-29 year olds (51.4%), 30-40 year olds (55.6%), and 40 and over (80.8%) have never participated in football. The majority of married students (68.3%) have never participated in football.

Table 18

Percentages of Participation in Frisbee for each Classification within  
the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	2.9	22.9	40.0	34.2
Male	8.6	31.4	31.4	28.6
AGE				
21-24	19.9	26.7	26.7	26.7
25-29	X	40.5	40.5	19.0
30-40	7.4	14.8	40.7	37.0
41 and Over	X	15.4	34.6	50.0
MARITAL STATUS				
Single	9.5	26.2	38.1	26.2
Married	1.6	25.4	36.5	36.5

The results from Table 18 indicate that the majority of females (62.9%) and males (62.8%) participated occasionally or rarely in frisbee. The majority of 21-24 year olds (53.4%) , 25-29 year olds (81%), and 30-40 year olds (55.5%) participated occasionally or rarely in frisbee. The majority of single (73.7%) and married (60.3%) students have participated at least once.

Table 19

Percentages of Participation in Golf for each Classification within the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	17.1	20.0	18.6	44.3
Male	25.7	42.9	17.1	14.3
AGE				
21-24	13.3	33.3	26.7	26.7
25-29	24.3	35.1	16.3	24.3
30-40	18.5	11.1	25.9	44.5
41 and Over	19.2	30.8	7.7	42.3
MARITAL STATUS				
Single	19.0	33.3	21.4	26.3
Married	20.6	23.8	15.9	39.7

The results of Table 19 indicate that the majority of males (68.6%) participated regularly or occasionally on golf. The majority of 25-29 year olds (59.4%) participate regularly or occasionally in golf. The majority of single (73.7%) and married (60.3%) students have participated at least once.

Table 20

Percentages of Participation in Hackey Sack for each Classification  
within the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	1.4	1.4	12.9	84.3
Male	X	8.6	17.1	74.3
AGE				
21-24	6.7	13.3	26.7	53.3
25-29	X	5.4	16.2	78.4
30-40	X	X	18.5	81.5
41 and Over	X	X	X	100.0
MARITAL STATUS				
Single	2.4	7.1	19.0	71.5
Married	X	1.6	11.1	87.3

The results of Table 20 indicated that for each classification within the variables, the majority of the students never participate in hackeysack.

Table 21

Percentages of Participation in Hang Gliding for each Classification  
within the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	X	X	2.9	97.1
Male	X	2.9	X	97.1
AGE				
21-24	X	6.7	6.7	86.6
25-29	X	X	2.7	97.3
30-40	X	X	X	100.0
41 and Over	X	X	X	100.0
MARITAL STATUS				
Single	X	2.4	4.8	92.8
Married	X	X	X	100.0

The results of Table 21 indicated that for each classification within the variables, the majority of the students never participate in hang gliding.

Table 22

Percentages of Participation in Hiking for each Classification within the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	20.0	42.9	24.2	12.9
Male	17.1	42.9	25.7	14.3
AGE				
21-24	20.0	33.3	26.7	20.0
25-29	21.6	37.8	29.7	10.8
30-40	25.9	51.9	3.7	18.5
41 and Over	7.7	46.2	38.4	7.7
MARITAL STATUS				
Single	21.4	31.0	26.2	21.4
Married	17.5	50.8	23.8	7.9

The results of Table 22 indicated that the majority of females (69.9%) and males (60%) participate occasionally or rarely in hiking. The majority of all classifications within the variable age participate regularly or occasionally in hiking. The 30-40 year old classification has the highest percentage of participating regularly or occasionally at (77.8%). The majority of single (52.4%) and married (68.3%) students participate regularly or occasionally in hiking.

Table 23 Percentages of Participation in Horseback Riding for each Classification within the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	2.9	10.0	45.7	41.4
Male	X	8.6	51.4	40.0
AGE				
21-24	X	20.0	40.0	40.0
25-29	5.4	10.8	56.8	27.0
30-40	X	3.7	51.9	44.4
41 and Over	X	7.7	34.6	57.7
MARITAL STATUS				
Single	4.8	9.5	47.6	38.1
Married	X	9.5	47.6	42.9

The results of Table 23 indicated that the majority of females (55.7%) and males (60%) participate occasionally or rarely in horseback riding. The majority of 41 and over classification (57.7%) never participate in horseback riding. The majority of single (57.1%) and married (57.1%) students participate occasionally or rarely in horseback riding.

Table 24

Percentages of Participation in Karate for each Classification within  
the Variables

Variables	Regularly	Occasionally	Rarely	Never
<b>SEX</b>				
Female	X	1.4	2.8	95.8
Male	X	X	5.7	94.3
<b>AGE</b>				
21-24	X	6.7	X	93.3
25-29	X	X	8.1	91.9
30-40	X	X	X	100.0
41 and Over	X	X	3.8	96.2
<b>MARITAL STATUS</b>				
Single	X	2.4	7.1	90.5
Married	X	X	1.6	98.4

The results of Table 24 indicated that for each classification within the variables, the majority of the students never participated in karate.



Table 25

Percentages of Participation in Kayaking for each Classification within  
the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	X	2.9	7.1	90.0
Male	2.9	2.9	11.3	82.9
AGE				
21-24	6.7	6.7	26.7	59.9
25-29	X	X	7.4	92.6
30-40	X	X	X	100.0
41 and Over	X	X	X	100.0
MARITAL STATUS				
Single	2.4	4.8	11.0	81.0
Married	X	1.6	6.3	92.1

The results of Table 25 indicated that for each classification within the variables, the majority of the students never participated in kayaking.

Table 26

Percentages of Participation in Lacrosse for each Classification within  
the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	X	5.7	1.4	92.9
Male	X	2.9	5.7	91.4
AGE				
21-24	X	6.7	13.3	80.0
25-29	X	5.4	2.7	91.9
30-40	X	7.4	X	92.6
41 and Over	X	X	X	100.0
MARITAL STATUS				
Single	X	9.5	2.4	88.1
Married	X	1.6	3.2	95.2

The results of Table 26 indicate that for each classification within the variables, the majority of the students never participate in lacrosse.

Table 27

Percentages of Participation in Mountaineering for each Classification within the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	X	4.3	5.7	90.0
Male	X	X	14.3	85.7
AGE				
21-24	X	13.3	20.0	66.7
25-29	X	X	8.1	91.9
30-40	X	3.7	3.7	92.6
41 and Over	X	X	7.7	92.3
MARITAL STATUS				
Single	X	4.8	9.5	85.7
Married	X	1.6	7.9	90.5

The results of Table 27 indicate that for each classification within the variables, the majority of the students never participate in mountaineering.

Table 28

Percentages of Participation in Ping Pong for each Classification within the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	X	12.9	47.1	40.0
Male	5.7	22.9	54.3	17.1
AGE				
21-24	6.7	20.0	60.0	13.3
25-29	2.7	16.2	59.5	21.6
30-40	X	18.5	44.5	37.0
41 and Over	X	11.5	34.6	53.8
MARITAL STATUS				
Single	4.8	16.7	54.8	23.7
Married	X	15.9	46.0	38.1

The results of Table 28 indicate that the majority of females (60%) and males (77.2%) participate occasionally or rarely in ping pong. The majority of 41 and over age classification (53.8%) never participate in ping pong. The majority of single (71.5%) and married (61.9%) students participate occasionally or rarely in ping pong.

Table 29

Percentages of Participation in Raquetball for each Classification  
within the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	4.3	11.4	20.0	64.3
Male	11.4	37.1	14.4	37.1
AGE				
21-24	6.7	40.0	20.0	33.3
25-29	8.1	29.8	18.9	43.2
30-40	7.4	3.7	25.9	63.0
41 and Over	3.8	11.5	7.7	77.0
MARITAL STATUS				
Single	9.5	33.3	11.9	45.3
Married	4.8	11.1	22.2	61.9

The results of Table 29 indicate that the majority of females (64.3%) never participate in raquetball. The majority of 30-40 year olds (63%) and 41 and over age classification (77%) never participate in raquetball. The majority of married students (61.9%) never participate in raquetball.

Table 30

Percentages of Participation in Rafting for each Classification within  
the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	X	7.1	12.9	80.0
Male	X	8.6	14.3	77.1
AGE				
21-24	X	20.0	13.3	66.7
25-29	X	8.1	21.6	70.3
30-40	X	3.7	7.4	88.9
41 and Over	X	3.8	7.7	88.5
MARITAL STATUS				
Single	X	11.9	19.1	69.0
Married	X	4.8	9.5	85.7

The results of Table 30 indicate that for each classification within the variables, the majority of the students never participate in rafting.

Table 31

Percentages of Participation in Roller Skating for each Classification  
within the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	X	14.3	41.4	44.3
Male	X	2.9	37.1	60.0
AGE				
21-24	X	6.7	46.7	46.7
25-29	X	13.5	37.8	48.7
30-40	X	11.2	44.4	44.4
41 and Over	X	7.7	34.6	57.7
MARITAL STATUS				
Single	X	14.3	45.2	40.5
Married	X	7.9	36.5	55.6

The results of Table 31 indicate that the majority of males (60%) never participate in roller skating. The majority of 41 and over classification (57.7%) never participate in roller skating. The majority of married students (55.5%) never participate in roller skating..

Table 32

Percentages of Participation in Sailing for each Classification within  
the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	7.1	15.8	17.1	60.0
Male	X	5.7	28.6	65.7
AGE				
21-24	X	13.3	33.3	53.4
25-29	8.1	10.8	21.6	59.5
30-40	3.7	18.5	11.1	66.7
41 and Over	38.0	7.7	23.1	65.4
MARITAL STATUS				
Single	7.1	11.9	26.2	54.8
Married	3.2	12.7	17.5	66.6

The results of Table 32 indicate that for each classification within the variables, the majority of the students never participate in sailing.



Table 33

Percentages of Participation in Scuba Diving for each Classification within the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	1.4	5.7	5.7	87.2
Male	X	5.7	8.6	85.7
AGE				
21-24	6.7	13.3	6.7	73.3
25-29	X	8.1	10.8	81.1
30-40	X	3.7	3.7	92.6
41 and Over	X	X	3.8	96.2
MARITAL STATUS				
Single	2.4	11.9	7.1	78.6
Married	X	1.6	6.3	92.1

The results of Table 33 indicate that for each classification within the variables, the majority of the students never participate in scuba diving.

Table 34

Percentages of Participation in Sky Diving for each Classification  
within the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	X	1.4	1.4	97.2
Male	X	X	2.9	97.1
AGE				
21-24	X	X	6.7	93.3
25-29	X	2.7	X	97.3
30-40	X	X	X	100.0
41 and Over	X	X	3.8	96.2
MARITAL STATUS				
Single	X	2.4	2.4	95.2
Married	X	X	1.6	98.4

The results of Table 34 indicate that for each classification within the variables, the majority of the students never participate in sky diving.

Table 35

Percentages of Participation in Soccer for each Classification within  
the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	X	4.3	12.9	82.8
Male	5.7	8.6	25.7	60.0
AGE				
21-24	X	13.3	26.7	60.0
25-29	5.4	2.7	21.6	70.3
30-40	X	11.1	14.8	74.1
41 and Over	X	X	7.7	92.3
MARITAL STATUS				
Single	4.8	9.5	16.7	69.0
Married	X	3.2	17.5	79.3

The results of Table 35 indicate that for each classification within the variables, the majority of the students never participate in soccer.

Table 36

Percentages of Participation in Softball for each Classification within  
the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	8.6	21.4	27.1	42.9
Male	22.9	28.6	22.9	25.6
AGE				
21-24	20.0	33.3	33.9	13.4
25-29	13.5	32.4	24.4	29.7
30-40	18.5	11.2	33.3	37.0
41 and Over	3.8	19.2	38.5	38.5
MARITAL STATUS				
Single	14.3	26.2	28.5	31.0
Married	12.7	22.2	23.8	41.3

The results of Table 36 indicated that the majority of males (51.5%) participate regularly or occasionally in softball. The majority of 21-24 year olds (53.3%) participate regularly or occasionally in softball. The majority of single (69%) and married (58.7%) students have participated in softball at least once.

Table 37

Percentages of Participation in Swimming for each Classification within the Variables

Variables	Regularly	Occasionally	Rarely	Never
<b>SEX</b>				
Female	34.3	52.9	11.4	1.4
Male	37.1	54.3	8.6	X
<b>AGE</b>				
21-24	40.0	53.3	6.7	X
25-29	43.2	48.6	8.2	X
30-40	37.0	59.3	3.7	X
41 and Over	19.2	53.8	23.2	3.8
<b>MARITAL STATUS</b>				
Single	45.2	45.2	9.6	X
Married	28.6	58.7	11.1	1.6

The results of Table 37 indicate that for each classification within the variables, the majority of the students participate regularly or occasionally in swimming.

Table 38

Percentages of Participation in Tennis for each Classification within  
the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	8.6	24.3	38.6	28.5
Male	20.0	48.6	20.0	11.4
AGE				
21-24	20.0	46.7	20.0	13.3
25-29	18.9	37.8	35.1	8.2
30-40	7.4	29.6	29.6	33.4
41 and Over	3.8	19.2	38.5	38.5
MARITAL STATUS				
Single	14.3	40.5	33.3	11.9
Married	11.1	27.0	31.7	30.2

The results of Table 38 indicate that the majority of males (68.6%) participate regularly or occasionally in tennis. The majority of 21-24 year olds (66.7%) and 25-29 year olds (56.7%) participate regularly or occasionally in tennis. The majority of single students (54.8%) participate regularly or occasionally in tennis.

Table 39

Percentages of Participation in Tubing for each Classification within  
the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	5.7	20.0	32.9	41.4
Male	2.9	14.3	45.7	37.1
AGE				
21-24	X	46.7	40.0	13.3
25-29	8.1	13.5	43.2	35.1
30-40	3.7	18.5	40.7	37.1
41 and Over	3.8	7.7	23.1	65.4
MARITAL STATUS				
Single	4.8	16.7	40.5	38.0
Married	4.8	19.0	34.9	41.3

The results of Table 39 indicate that the majority of females (52.9%) and males (60%) participate occasionally or rarely in tubing. The majority of students in the 41 and over classification (65.4%) never participate in tubing. The majority of single (57.2%) and married (53.9%) students occasionally or rarely participate in tubing.

Table 40

Percentages of Participation in Volleyball for each Classification  
within the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	12.9	30.0	25.7	31.4
Male	20.0	31.4	28.6	20.0
AGE				
21-24	20.0	46.7	26.7	6.6
25-29	24.3	27.1	18.9	27.7
30-40	11.1	44.4	29.7	14.8
41 and Over	3.8	11.5	34.7	50.0
MARITAL STATUS				
Single	11.9	35.7	26.2	26.2
Married	17.5	27.0	27.0	28.5

The results of Table 40 indicated that the majority of females (55.7%) and males (60%) occasionally or rarely participate in volleyball. The majority of students in the 21-24 age classification (66.7%), 25-29 age classification (51.4%), and 30-40 age classification (55.9%) regularly or occasionally participate in volleyball. The majority of single (61%) and married (54%) students occasionally or rarely participate in volleyball.



Table 41

Percentages of Participation in Walking/Jogging for each Classification within the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	68.6	25.7	4.3	1.4
Male	57.1	22.9	14.3	5.7
AGE				
21-24	46.6	26.7	26.7	X
25-29	59.5	29.7	5.4	X
30-40	70.4	25.9	3.7	X
41 and Over	76.9	15.5	3.8	3.8
MARITAL STATUS				
Single	54.8	26.2	16.2	2.3
Married	71.4	23.8	1.6	3.2

The results from Table 41 indicated that for each classification except the 21-24 age classification (46.6%) the majority of the students participate regularly.

Table 42

Percentages of Participation in Water Skiing for each Classification  
within the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	14.3	17.1	41.5	37.1
Male	17.1	20.1	31.4	31.4
AGE				
21-24	20.0	20.0	40.0	20.0
25-29	13.5	21.7	32.7	32.4
30-40	3.7	25.9	44.5	25.9
41 and Over	X	3.8	38.5	57.7
MARITAL STATUS				
Single	14.3	19.0	35.7	31.0
Married	4.8	17.5	39.7	38.0

The results from Table 42 indicated that the majority of females (58.6%) and males (51.5%) participate occasionally or rarely. The majority of students in the 41 and over age classification (57.7%) and married (57.2%) participate occasionally or rarely in water skiing.

Table 43

Percentages of Participation in Weight Training for each Classification within the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	8.6	12.9	18.5	60.0
Male	25.7	37.1	14.3	22.9
AGE				
21-24	33.3	33.3	20.1	13.3
25-29	16.2	29.7	16.2	37.9
30-40	X	14.8	14.8	70.4
41 and Over	15.4	7.7	19.2	57.7
MARITAL STATUS				
Single	16.7	31.0	21.0	31.0
Married	12.7	14.3	14.3	58.7

The results of Table 43 indicated that the majority of females (60%) never participate in weight training. The majority of students in the 30-40 (70.4%) and the 41 and over (57.7%) age classifications never participate. The majority of married students (58.7%) never participate in weight training.

Table 44

Percentages of Participation in Wind Surfing for each Classification  
within the Variables

Variables	Regularly	Occasionally	Rarely	Never
SEX				
Female	2.9	4.3	7.1	85.7
Male	2.9	5.7	11.4	80.0
AGE				
21-24	16.7	13.3	6.7	73.3
25-29	5.4	5.4	10.8	78.4
30-40	X	3.7	7.4	88.9
41 and Over	X	X	7.7	92.3
MARITAL STATUS				
Single	7.1	9.5	9.5	73.9
Married	X	1.6	7.9	90.5

The results of Table 44 indicated that for each classification within the variables, the majority of the students never participate in wind surfing. The demographic variables sex, age, and marital status have been included in this study to show what the distributions are for each of the 42 physical recreation activities. Tables 45-47 provide data indicating what the top five activities regularly or occasionally participated in are for the classifications within the demographic variables.

Table 45

Top Five Activities Regularly or Occassionally Participated in by Sex

Variables	Regularly	Occasionally	Rarely	Never
FEMALE				
Biking	30.0	55.7	12.9	1.4
Dancing	20.0	52.9	18.6	8.5
Hiking	20.0	42.9	24.2	12.9
Swimming	34.3	52.9	11.4	1.4
Walking/Jogging	68.6	25.7	4.3	1.4
MALE				
Biking	28.6	45.7	20.0	5.7
Golfing	25.7	42.9	17.1	14.3
Swimming	37.1	54.3	8.6	X
Tennis	20.0	48.6	20.0	11.4
Walking/Jogging	57.1	22.9	14.3	5.7

The results from Table 45 indicated that biking, swimming, and walking were the top three activities for females and males. The other two activities, dancing and hiking, listed in the top five for females were noncompetitive. However, the other two activities, golfing and tennis, listed in the top five for males were both competitive sports. These results support Straub's (1976) conclusions that the number of females participating in fitness activities or lifetime sports is increasing. The results from Table 45 also support Dulles (1965) findings that males participate more in competitive sports than females.

Table 46

Top Five Activities Regularly or Occassionally Participated in by Age

Variables	Regularly	Occasionally	Rarely	Never
21-24				
Biking	40.0	33.3	20.0	6.7
Swimming	40.0	53.3	6.7	X
Tennis	20.0	46.7	20.0	13.3
Volleyball	20.0	46.7	26.7	6.6
Walking/Jogging	46.6	26.7	26.7	X
25-29				
Biking	29.7	51.4	8.9	X
Camping	21.6	45.9	21.7	10.8
Dancing	24.3	54.1	16.2	5.4
Swimming	43.2	48.6	8.2	X
Walking/Jogging	59.5	29.7	5.4	5.4
30-40				
Biking	29.6	59.3	3.7	7.4
Dancing	18.5	48.1	25.9	7.5
Hiking	25.9	51.9	3.7	18.5
Swimming	37.0	59.3	3.7	X
Walking/Jogging	70.4	25.9	3.7	X

Table 47.

Top Five Activities Regularly or Occassionally Participated in by Age

Variables	Regularly	Occasionally	Rarely	Never
41 AND OVER				
Biking	23.1	57.7	19.2	X
Boating	7.7	34.6	34.6	23.1
Dancing	7.7	42.3	34.4	15.4
Swimming	19.2	53.8	6.7	X
Walking/Jogging	76.9	15.5	3.8	3.8

The results from Table 46 and 47 indicated that biking, swimming, and walking/jogging were listed in the top five activities for all age classifications. Dancing was listed in the top five activities for all age classifications except the 21-24 age classification. The 21-24 age classification had two competitive sports, tennis and volleyball, included on their top five list. The 25-29, 30-40, and 41 and over age classifications all had noncompetitive activities listed in their top five answers.

Table 48

Top Five Activities Regularly or Occassionally Participated in by  
Marital Status

Variables	Regularly	Occasionally	Rarely	Never
SINGLE				
Biking	23.8	40.5	28.6	7.1
Dancing	23.8	40.5	26.2	9.5
Swimming	45.2	45.2	9.6	X
Tennis	14.3	40.5	33.3	11.9
Walking/Jogging	54.8	26.2	16.2	2.3
MARRIED				
Biking	33.3	60.3	6.3	X
Dancing	15.9	47.6	27.0	9.5
Hiking	17.5	50.8	23.8	7.9
Swimming	28.6	58.7	11.1	1.6
Walking/Jogging	71.4	23.8	1.6	3.2

The results from Table 47 indicated that married and single students listed biking, dancing, swimming, and walking/jogging as three of their top five choices. One of the other top five choice for single students was tennis. Married students other top five choice was hiking. Single students had one activity out of the top five choices that was competitive, tennis. Married students did not have any competitive activities in their top five choices.



## Discussion

This section includes a discussion of the findings of this study. The results presented in this chapter indicate that graduate students are interested in a wide variety of physical recreation activities. Of primary importance were the activities which students indicated occasional or regular participation in. The results of Table 2 indicated that a majority of students participate regularly or occasionally in biking (81.9%), boating (53.3), camping (56.2%), dancing (63.8%), fishing (53.3%), hiking (61%), swimming (88.6%), and walking/jogging (89.6%).

The results presented in this chapter indicated that over a third of the graduate students regularly participate in two physical recreation activities: walking/jogging and swimming. The results of Table 2 indicated that the activity with the highest percentage of regular participation was walking/jogging (64.8%). The activity with the second highest percentage of regular participation was swimming (35.2%).

The results presented in this chapter indicated that there were six activities that over 90% of the graduate students never participate in. Those activities were aikido (96.2%), caving/spelunking (90.5%), hang gliding (97.1%), karate (95.2%), lacrosse (92.4%), and sky diving (97.0%).

The results also indicated that fewer than 2% of the graduate students participate regularly in 16 activities: aikido, badminton, caving/spelunking, hackey sack, hang gliding, horseback riding, karate, kayaking, lacrosse, mountaineering, ping pong, rafting, roller skating,

scuba diving, sky diving, and soccer. Of those activities, not one graduate student indicated to regularly participate in aikido, hang gliding, karate, lacrosse, mountaineering, rafting, roller skating, or sky diving.

The results from Tables 46-48 indicated that the major similarity between the variables sex, age, and marital status was that each identified biking, swimming, and walking as the activities most regularly or occasionally participated in.

The results from Tables 46-48 indicated that the differences of participation for the top five activities were boating, camping, dancing, golfing, hiking, tennis, and volleyball. Boating was only listed under the 41 and over age classification. Camping was listed under the 25-29 year old classification. Dancing was listed under female classification and by students 25 or older. Golfing was listed only under the male classification. Hiking was listed under female classification and the 30-40 year old classification. Tennis was listed under the male classification and the 21-24 year old age classification.

#### Implications

The purpose of this study was to examine the distribution of summerschool graduate students' participation levels in selected physical recreation activities. The results of this study may be useful to student activities, intramurals, housing, extended education, physical education department, and recreation department. These are the primary departments that provide physical recreation activities for graduate students.

The results of this study provide these departments with the activities graduate students regularly, occasionally, rarely, or never participate in. Tables 3-44 indicate the percentages of participation in each activity for each classification within the variables sex, age, and marital status. The distributions of the participation levels for the graduate students may be very useful for marketing specific segments of the population. The results from Table 2 provide information to assist in planning a comprehensive university recreation program that takes into account graduate students' recreational interests.

Despite the concern about inactivity, much emphasis continues to be placed on team sports. Based on the results of Table 2 it would be beneficial for physical educators and recreation professions to reevaluate physical education curricula and provide a higher number of noncompetitive activities in light of the objective of providing a foundation for life-long physical activity involvement.

Female graduate students, students age 25 or older, and married student listed noncompetitive activities as their top five activities based on regular or occasional participation. The top three activities with the highest percentage of participation for all classifications were walking/jogging, swimming, and biking. All of these activities are noncompetitive. Therefore, with graduate students making up about 20% of the entire student population it would seem appropriate for recreational programmers to incorporate more noncompetitive activities into a comprehensive university recreation program.

Finally, a word of caution is necessary in reference to the conclusions concerning the decline of physical activity participation

with increasing age. It is possible that today's older graduate students had lower participation rates while young than do today's younger graduate students. Therefore, the decline of participation evident from the results may actually be less drastic than it appears.

#### Recommendations

From these results, the following recommendations have been made:

1. Research should be conducted to examine why graduate students participate in the physical recreation activities.
2. Research should be conducted to examine how graduate students use their leisure time.
3. Research should be conducted similiar to this study on undergraduate students to ascertain their physical recreation interests.
4. Research should be conducted to ascertain the relationship between recreation participation and with whom participation takes place.
5. Research should be done using this instrument to compare college educated people with noncollege educated people.
6. A longitudinal study needs to be conducted utilizing the same instrument to determine trends in recreation participation.

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APPENDIX A

July 2, 1987

Dear Graduate Student:

Hello, my name is Douglas Kuenn. I am a graduate student in college student personnel conducting a survey in conjunction with Student Activities. We are conducting this survey to find out what summer graduate students' physical recreation interests are. The responses you make to this survey will be confidential. The results will be reported using group data only. Thank you very much for your time, input, and cooperation as it is truly appreciated.

Sincerely,

*Douglas Kuenn*

Douglas Kuenn

PHYSICAL RECREATION INTEREST SURVEY

PART I. DEMOGRAPHICS:

- |  |  |
|--|--|
| <p>1. Sex:<br/>            (a) Female<br/>            (b) Male</p>                                 | <p>3. Marital Status:<br/>            (a) Single<br/>            (b) Married</p> |
| <p>2. Age:<br/>            (a) 21-24    (c) 30-40<br/>            (b) 25-29    (d) 40 and over</p> |  |

PART II. PHYSICAL RECREATION ACTIVITY INTERESTS:

Please read these instructions before completing Part II.

We are interested in your participation in these activities regardless of whether they occurred on campus or elsewhere. Please use the following definitions for REGULARLY, OCCASIONALLY, RARELY, and NEVER to help you in responding to the activities:

- REGULARLY: I regularly participate in or spend time on that particular activity; I'm "heavily into this ...."
- OCCASIONALLY: I occasionally participate in that particular activity; I'm "somewhat into this ...."
- RARELY: I have participated in this particular activity once or twice; I'm "not really into this ...."
- NEVER: I have never participated in this activity; I'm "not into this activity at all ...."

(OVER)



Please rate your level of participation for each activity specified according to the following scale:

- A Regularly Participate
- B Occasionally Participate
- C Rarely Participate
- D Never Participate

- |                       |   |   |   |   |
|-----------------------|---|---|---|---|
| 4. Mountaineering     | A | B | C | D |
| 5. Rafting            | A | B | C | D |
| 6. Sky Diving         | A | B | C | D |
| 7. Backpacking        | A | B | C | D |
| 8. Biking             | A | B | C | D |
| 9. Camping            | A | B | C | D |
| 10. Sailing           | A | B | C | D |
| 11. Canoeing          | A | B | C | D |
| 12. Kayaking          | A | B | C | D |
| 13. Scuba Diving      | A | B | C | D |
| 14. Hiking            | A | B | C | D |
| 15. Caving/Spelunking | A | B | C | D |
| 16. Tubing            | A | B | C | D |
| 17. Hang Gliding      | A | B | C | D |
| 18. Fishing           | A | B | C | D |
| 19. Windsurfing       | A | B | C | D |
| 20. Horseback Riding  | A | B | C | D |
| 21. Boating/Rowing    | A | B | C | D |
| 22. Water Skiing      | A | B | C | D |
| 23. Swimming          | A | B | C | D |
| 24. Golfing           | A | B | C | D |
| 25. Tennis            | A | B | C | D |
| 26. Softball          | A | B | C | D |

- |                         |   |   |   |   |
|-------------------------|---|---|---|---|
| 27. Walking/jogging     | A | B | C | D |
| 28. Aerobics            | A | B | C | D |
| 29. Roller Skating      | A | B | C | D |
| 30. Weight Training     | A | B | C | D |
| 31. Frisbee             | A | B | C | D |
| 32. Soccer              | A | B | C | D |
| 33. Basketball          | A | B | C | D |
| 34. Volleyball          | A | B | C | D |
| 35. Bowling             | A | B | C | D |
| 36. Raquetball          | A | B | C | D |
| 37. Football            | A | B | C | D |
| 38. Ping Pong           | A | B | C | D |
| 39. Hackey Sack         | A | B | C | D |
| 40. Karate              | A | B | C | D |
| 41. Aikido              | A | B | C | D |
| 42. Badminton           | A | B | C | D |
| 43. Lacrosse            | A | B | C | D |
| 44. Dancing             | A | B | C | D |
| 45. Billiards           | A | B | C | D |
| Others (please specify) |   |   |   |   |
| 46.                     | A | B | C | D |
| 47.                     | A | B | C | D |
| 48.                     | A | B | C | D |
| 49.                     | A | B | C | D |
| 50.                     | A | B | C | D |

**THANK YOU for taking the time to complete this survey! Please return this in the enclosed self-addressed stamped envelope!**