WHY WOMEN DO NOT PARTICIPATE IN INTRAMURALS: A FOLLOW UP STUDY

by

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(ABSTRACT)

The purpose of this study was to determine 1) if there has been a change over the past five years in the percentage of females participating in intramural activities at Virginia Tech, and 2) if the reasons for non-participation have changed. Four hundred college females were surveyed. The data were analyzed by frequency distributions and, in some casese, cross-tabulations. The results revealed that there has been an increase in the percentage of women participating in intramural activities. Participation levels increased from 35% in 1984 to 45% in 1990. The main reason given for non-participation was lack of knowledge followed by academic concerns. The findings of this study may assist the Recreational Sports Office staff in determining where their program areas need to be developed and how they can better meet the needs of the total population at Virginia Tech.

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CHAPTER ONE

Attributes and Latitudes of the Study

Introduction

If a recreational sports program is going to be successful it must meet two basic criteria. First it must "serve all students, providing participation outlets for everyone, no matter how small the group" (Chestnutt, Nadeau, & Taylor, 1984, p. 93). Second, it should "exclude no one, honor all who are deserving and show no favortism whatsoever in regard to sex, race or any other distinction" (Chestnutt, Nadeau, & Taylor, 1984, p. 93). The Recreational Sports program at Virginia Tech bases its philosophy on these very guidelines. Its number one goal is to "provide and meet the many needs of the diverse population at Virginia Tech" (S. D. Yeagle, personal communication, February, 1990).

Virginia Tech's Recreational Sports program (hereinafter referred to as Recreational Sports) is one of the largest on the east coast. It offers diverse programming which is extended to a large proportion of the student body. However, female participation seems to be considerably lower than male participation in the areas of team sports and individual and dual events. In order to satisfy its number one goal, Recreational

Sports needs to find a way to better serve its female population.

Justification

In the spring of 1984, Linda Knight conducted a survey to "identify why women do not participate in intramural sports and to determine whether a relationship exists between location of residence, class status and non-participation" (Knight, 1984, p. ii). Results found that of the 400 females surveyed, only 35% participated actively in intramural programs. According to recent team and individual and dual summary reports, there is still a significant number of women who do not participate as compared to the number of men who do participate (Yeagle, S. D. 1989). Follow up research can help Recreational Sports determine if participation has increased over the past five years and if the attitudes of female students has changed in regard to why they do or do not participate. By having this knowledge, necessary changes and adjustments in programming can be made to more efficiently meet the needs of the female population at Virginia Tech.

Statement of the Problem

The Virginia Tech Recreational Sports program offers equal opportunities for both male and female participation in team sports and individual and dual activities. Any sport or activity that is offered is open to both men and women. There are separate leagues established for each gender. When there aren't enough women to complete a league or activity, they are given the option of participating in men's leagues (Yeagle, S. D., 1989).

Women in general have made great strides to overcome the barriers placed on them by society in terms of athletic participation. In the last 15 to 20 years women have gained greater social acceptance in sport (Boutilier & SanGiovnni, 1983). However, female participation rates still remain considerably lower than their male counterparts. This study answers the following questions about female participation in recreational sports at Virginia Tech:

1. Has there been a change over the past five years in the percentage of females who participate in intramural activities?
2. Have the reasons for female participation or non-participation changed?

Delimitations

The following limitations are placed on the design of this study:

1. The study is limited to only female undergraduate and graduate students at Virginia Tech.

2. The sample size is limited to 400 surveys, which is equivalent to the number of the 1984 survey.

Assumptions

1. This and the previous survey technique are a reliable procedure for determining participation rates.

2. The female students surveyed are honest in their replies to the survey questions.

3. There may be error in the assessment of reasons for participation or non-participation due to the administering of just one survey to one sample.

Summary

Women have made great strides over the past decade in terms of gaining greater social acceptance in sport. Yet, as we are about to enter a new decade female participation percentages still lag behind those of male participation. Information gained from this study can help determine what steps need to be taken in an attempt to increase participation and better meet the needs of the female student body at Virginia Tech.

CHAPTER TWO

Review of Literature

The purpose of this literary review is to provide a brief historical overview of women in intramural activities and to determine what other research has been conducted in the area of female participation in these activities. There have been several studies conducted fairly recently to help determine what the actual participation numbers are as compared to men and what barriers still exist for female participation.

Historical Overview

Intramural sport has been defined as "structured contests, tournaments, leagues or other events where participation is limited to the setting within which the total recreational sport system is located" (Mull, Bayless, & Ross, 1983, p. 6). It is the intention of intramural programs, frequently referred to as "recreational sports", to provide opportunity and enjoyment for people of all shapes, sizes, skill levels and interests (Mull, Bayless, & Ross, 1983).

Intramural programs have been a part of American society dating all the way back to the colonial period (Kleindienst & Weston, 1964). However, it was men who participated in these activities and not women. Socially, it was not acceptable for a women to be

involved in recreational type activities; these activities were for men only. "Sporting ability was hardly compatible with women's traditional subordinate role in partriarchal society" (Lenskyj, 1986, p. 11).

Not until the mid to late 1970's did women's participation in intramural programs begin to increase. Initially, participation in these programs was very limited. Women had not had the cultural heritage of sport that men had (Bishop, 1977). It was hard for women to step forward and take part in a world that had been dominated by their male counterparts. Women were held back even more by "their own image of themselves and the well-learned precept that they should always consider how their bodies looked rather than how they felt" (Kaplan, 1979, p. 2).

Changes have occured since the 1970's and America's view of the athletic or active woman has gone from suspect to admiration (Kaplan, 1979). The number of women participating in athletic activities has increased and this is partly due to the changes that society has produced starting with the youth in the elementary and secondary schools (Bishop, 1977). Great strides have been taken since the 1970's for women. However, as we enter the 1990's it is evident that

women's participation in sport is still struggling and new issues are surfacing.

Related Literature

The National Intramural Recreational Sports Association (NIRSA) conducted a 1988 Marketing Survey to help determine "pertinent market characteristics of the college recreational sports participant" (Henderson, J., 1988). The survey was sent out to 377 affiliate institutions, of which 120 were returned. Institutions of all types were represented in the survey, such as public and private institutions, senior and junior colleges, and commuter and residential institutions. In terms of participation, the survey showed that out of 615,033 participating students 77,940 (13%) were women, 411,642 (67%) were male, and 125,451 (20%) were co-recreational participants (Henderson, J., 1988). These figures support the idea that even today female participation is considerably lower than male participation.

In the spring of 1988, Deborah Bialeschki of the University of North Carolina - Chapel Hill, conducted research on "Why Don't Students Play in Intramurals?" The purpose of her research was to "analyze intramural participants and non-participants in terms of demographic characteristics, leisure attitudes, and

motivating factors and barriers to intramural participation as a way to understand possible influences on participation" (Bialeschki, 1988, p. 46). She obtained 141 useable surveys from 153 college students who were enrolled in one of three introductory social science classes at the University of North Carolina - Chapel Hill.

According to her data, of the 141 students surveyed, 75 or 53% were female and 66 or 47% were male. Eighty-three of the 141 subjects surveyed indicated that they did participate in intramural activities, while 58 indicated that they did not. Of the male population, 79% stated that they did participate in intramural activities, while 21% indicated that they did not. Of the female population, 41% stated that they did participate, while 59% indicated that they did not participate in intramural activities (Bialeschki, 1988). This research supports the concept that presently women are not as active in recreational sports as men.

It is evident from previous research that there are distinct differences in the percentage of male participants as compared to the percentage of female participants. Other research has been conducted to help determine the reasons or barriers for this lack of

participation (Chestnutt, Nadeau, & Taylor, 1963; Stevenson, Reznik & Zuercher, 1979). According to studies conducted by McGuire (1956); Hall & Shane (1975); and Searle & Jackson (1984), the most common barriers are lack of time due to academics, lack of skills, lack of information, and inconvienent scheduling (cited in Bialeschki, 1988). It was also noted in other research by Colley (1984) and Loia (1976) that male participation was greater due to a more competitive level of motivation (cited in Bialeschki, 1988). Also, females participated less because of sociability and a lack of fitness (Bialeschki, 1988).

Finally, there is the information that is provided by Linda Knight's 1984 study which indicated that of the 400 Virginia Tech females surveyed, 141 (35%) participated while 258 (65%) did not participate. The percentage of freshman surveyed who did not participate due to lack of publicity was 91%. Sixty-two percent of sophomores and 34% of the seniors did not participate mainly due to lack of publicity. Fifty-two percent of the juniors did not participate, their main reasons being lack of knowledge and academics (Knight, 1984).

Summary

Previous research indicates that there are greater proportions of males participating in intramural activities than females. It is evident that certain common barriers do exist for both men and women, but these barriers seem to have a greater impact on female participation. Lack of time due to academics, lack of publicity, and lack of skills seem to be the major factors that effect female participation.

CHAPTER THREE

Methodology and Procedures

This chapter first focuses on the type and number of subjects in this study. It examines the procedures used for data analysis, the instruments to be used, and the independent variables involved.

Sample

The sample consists of 400 female students at Virginia Tech. This is the same number used in the 1984 survey. In the Fall of 1984 the total student population was 21,454. Of this total population 8,842 or 41% were women. In the fall of 1989 the total population was 22,922. Of this total, 9,227 or 40% were women (S. J. Noakes, personal communication, January, 1990). The student body and the percentage of women attending Virginia Tech has basically remained proportionate. To keep this study consistent, it was appropriate to use the same sample size used in the 1984 study. Both undergraduate and graduate students were surveyed.

The survey was conducted randomly and was distributed in four designated areas on campus. The four areas were between Newman Library and the Virginia Tech Bookstore; in front of McBryde; between War Memorial Hall and Campbell; and between Pamplin and

Burruss Hall. These areas were chosen due to the heavy but general traffic flow of students. The designated areas provided opportunity for both on campus and off campus students to be involved in the surveying process. This is the same basic reasoning that Linda Knight used in choosing her locations. However, there were some differences in those locations due to the closing of Squires Student Center and the addition that was made to Newman Library. These two physical changes to the Virginia Tech campus have altered the flow of traffic in those areas.

Design

An ex post facto design was used in this study. This design was relevant to this study because there was no control or manipulation of the independent variables. It was not the intention of this follow-up study to attempt to alter beliefs of those being surveyed; rather, it was the intention to discover information. This study helped to determine what changes have occured over the past five years and whether participation rates have increased or decreased.

Instrumentation

A survey was used to determine the percentage of women who are currently participating in intramural

activities at Virginia Tech. The same format and questions were used as found in the 1984 survey (Appendix A) with the exception of five questions. Questions 9, 12, and 15 of the 1984 survey have been removed (Appendix B). Question nine is not necessary because at this point the activities that might interest the student are not a concern of this study. Question number 12 received a very low response rate on the 1984 survey, so it was deleted. Finally, question 15 was removed because this area was covered through several questions. If a person does not have the time to participate, this is one area that can not be controlled by the Recreational Sports Office. The subject does have the opportunity to support informal leagues which might be the only form of activity that would be less time consuming.

Two questions were added to the 1984 survey. First, question six was added to the new survey to determine in which areas those who participate are most involved: team sports or individual and dual sports. As recommended by Linda Knight, question 12 was added to address the subject of non-athleticism and its effects on non-participation.

Independent Variables

The independent variables that were factors in this study were interest in intramural activites, time availability, academic concerns, skill level, publicity or lack of knowledge, and competitiveness.

Procedure for Data Collection

Before a survey can be conducted on this campus it must first be approved by the university. A certificate of approval for research involving human subjects was obtained through the Division of Health and Physical Education. Several forms were completed which explained in detail what would be involved in this particular research process. The information that was provided included the title of the proposal, background information and justification, purpose, methods used, and a statement describing the level of risk to the subjects involved. Once this information was completed it was presented to the Human Subjects Committee. After reviewing the information the committee could either approve or disapprove the research. This procedure was followed and this study was approved.

After this step was completed and approval was given, arrangements were made with the personnel in the Tests and Measurements Office to obtain Opscan sheets

for the survey. An appointment was made with someone from that office to make sure the survey would be useable in terms of its format as it related to the Opscan procedure. The Tests and Measurements Office provided the actual Opscan sheets and instructions for placing the survey on those sheets. Once the survey was typed onto the Opscan sheets, the number of copies that were needed (400) were xeroxed. The survey was then ready for distribution.

There were 8 assistants who aided in the distribution of the survey. These assistants were instructed and trained specifically on the procedure for distributing the survey. First, the assistants were informed of the survey content and its purpose. It was emphasized to them that this would be a random sample. The importantance of randomly approaching each of the subjects was stressed.

Next, each assistant read over the survey by themselves. As a group, each question was discussed to ensure that everyone understood what each question asked. There was also an explanation of how the Opscan works and the importance of filling in the blanks correctly. At this point it was stressed that, in presenting the survey to the subjects, the assistant

must inform the subject that this survey is completely anonymous.

It was also important to instruct the assistants to keep track of the numbers of those who refuse to take the survey. This was actually done on a separate tally sheet (Appendix C) which listed various reasons for not taking the survey. The reasons given on the tally sheet are not enough time, not interested, dislike intramural activities, dislike surveys, and other. The assistant was instructed to place a tally mark beside the reason given by the subject for not participating. This information is useable in determining how many subjects were approached before 400 surveys were actually completed.

The procedure for the actual day of the survey was then explained. Each assistant was given a specific location and time to work. They were asked to visit their locations the day before the survey was supposed to take place.

The survey took place on a Monday starting at 9:00 a.m. and was completed by 4:30 p.m. This day was chosen because Mondays and Wednesdays are generally heavy class days at Virginia Tech. Had there been bad weather, the survey would have been made up on the

following Wednesday. Distribution of the survey was as follows:

1. Assistants were stationed at their designated areas of campus.

2. Assistants were provided clipboards, pencils and a folder in which to place completed surveys.

3. Before administering the survey, the assistants were instructed to first ask the subject if she had already been approached to take this survey. This was done to keep from repeating data.

4. Once the assistant approached each subject and determined that the subject had not taken the survey, the assistant briefly explained the survey's purpose.

5. After each subject completed the survey, the assistant thanked the subject for participating.

6. One assistant was responsible for going to each of the locations every half hour and picking up the completed surveys. Each location was given the same number of surveys. Once all the surveys at a particular station were complete, the station closed. This helped keep track of exactly how many surveys had been completed. This process continued until 400 surveys were collected..

Data Analysis

Once the surveys were completed, the Opscans were tabulated. It was important to have the data read off the Opscan in the order the questions were asked on the survey. This allowed for the data file to be set up accordingly.

Because the data obtained from the 1984 study is not exactly matched with the data obtained from this replicated study, comparisons are made in terms of percentages. The chart format utilized by Knight (1984) is used to compare the data from this replicated study to the data found in the 1984 study. Frequency analysis was utilized to actually determine if the percentage of women participating has changed over the past five years.

Statistical results are presented as they relate to the 16 questions asked in the survey. The total number of females approached is documented. The numerical values for those responses of participation or non-participation according to class status are noted. There is also a breakdown of the students surveyed according to on or off campus residency and whether or not they are active participants. The six categories that the survey focuses on for non-participation (disinterest in activities,

competitiveness, lack of publicity, inconvenient program times, academic concerns, and lack of skill) are tabulated. The statistical methods used to analyze all of this data were frequency distributions and cross tabulations.

Summary

A survey was conducted randomly of 400 female undergraduate and graduate students at Virginia Tech. Eight assistants were instructed and trained on the procedure for distributing the survey. The surveying process began on a Monday morning and continued until 400 surveys were completed. Once the surveys were completed, frequency analysis was utilized to determine if the percentage of women participating has changed over the past five years. Statistical results were presented as they related to the 16 survey questions.

CHAPTER FOUR

Results

Introduction

There are four major areas covered in this chapter. First, the data from the present survey has been analyzed and is presented. Second, the results from the 1984 study have been compared to the results of this replicated study and analyzed in light of the research questions presented in Chapter One of this thesis. Third, there is an analysis of how useful the survey was and what changes could be made to improve the survey. Finally, there is a summary.

Current Survey Results

In the process of attempting to obtain 400 useable surveys, 446 female Virginia Tech students were actually approached during the surveying process. Of the 46 female students who refused to participate in the surveying process, 31 indicated that they did not have time to take the survey. The only other response given was that they were not interested.

In actual analysis of the surveys, it was discovered that one of the completed Opscan forms was actually not useable. Therefore, the total number of useable surveys for this study was 399. Of the 399 female students surveyed, 178 (45%) indicated that had

participated in intramural activities at Virginia Tech. Two hundred and twenty-one (55%) students indicated that they had not participated in intramural activities (Table 1).

The total sample consisted of 103 (26%) freshmen, 107 (27%) sophomores, 86 (21%) juniors, 87 (22%) seniors, and 17 (4%) graduate students (Table 2). Of the 103 freshman surveyed, 26 (25%) had participated in intramural activities before, while 77 (75%) had never participated. Of the sophomores surveyed, 46 (43%) indicated that they had participated in intramural activities, while 60 (57%) indicated that they had not participated. Of the juniors, 46 (53%) indicated that they had participated in intramural activities, while 40 (47%) indicated that they had not participated. Of the seniors surveyed, 48 (55%) indicated that they had participated in intramural activities, while 39 (45%) indicated that they had not participated. Of the graduate students surveyed, 12 (71%) indicated that they had participated in intramural activities, while five (29%) had not participated (Table 2).

Of the 399 female students who participated in the survey, 216 (54%) lived on campus and 183 (46%) lived off of campus (Table 3). Of those who lived on campus, 84 (39%) did participate and 132 (61%) did not

Table 1

Responses of Participation or Non-Participation

Participation	No.	%
Yes	178	45
No	221	55
Total	399	100

Table 2

Responses of Participation by Class Status

	Class Status					
Participation	F	S	Jr.	Sr.	Gr.	Tot.
Yes	26	46	46	48	12	178
	25%	43%	53%	55%	71%	45%
No	77	60	40	39	5	221
	75%	57%	47%	45%	9%	55%
Total	103	106	86	87	17	399
	26%	27%	21%	22%	4%	100%

Table 3

Responses of Participation by Place of Residence

Participation	On Campus	Off Campus	Total
Yes	84	94	178
	39%	51%	45%
No	132	89	221
	61%	49%	55%
Total	216	183	399

participate in intramural activities. Of those who lived off campus, 94 (51%) did participate in intramural activities, while 89 (49%) did not participate (Table 3).

The next set of data refers to the responses of questions four through seven of the survey. These questions applied to only the 178 subjects who indicated that they had actually participated in intramural activities. Of those 178 subjects, 98 (55%) stated that they had participated in the fall, while 80 (45%) indicated that they had not participated in the fall. Ninety-six (54%) stated that they had participated in the winter, while 82 (46%) stated that they had not participated in the winter.

Question six of the survey referred to the specific areas of participation being either team sports, individual and dual activities, or both. In the area of team sports, 143 (80%) subjects indicated that this was the area in which that they had been involved. Twenty (11%) of those surveyed indicated that they had participated in the individual and dual activities. There were only 15 (8%) subjects who responded as having participated in both team sports and individual and dual activities.

Question seven addressed possible reasons for participation in intramural activities at Virginia Tech. There were seven options given of which only one could be chosen. Eighty-six (48%) of those surveyed revealed that they participated in intramural activities for fun. Physical exercise received the second highest number of responses. Fifty (28%) of those surveyed revealed that this was their main reason for participating. Twenty-two (12%) of those surveyed indicated that they participated to be with friends. Eleven (6%) of those surveyed indicated that competition was their main reason for participating. Meeting people only received six (4%) responses as a reason for participating in intramural activities. Three (2%) subjects responded to the "other" category as a reason for participating (Table 4). There was one other choice of "awards" given, but no one responded to this option as a reason for participating.

Questions eight through sixteen were concerned with the reasons why female students at Virginia Tech do not participate in intramural activities. Questions eight and nine addressed the area of inconvienent program times. Fifty (24%) of those surveyed indicated that this was a valid reason for not participating, while 162 (76%) of those surveyed indicated that this

Table 4

Reasons for Participation

Reasons	No.	%
Physical Exercise	50	28
Competition	11	6
To Meet People	6	4
For Fun	86	48
To Be With Friends	22	12
Awards	---	---
Other	4	2
Total	179	100

was not a legitimate reason for not participating (Table 5). When asked if the program times were more convienent would they participate, 98 (46%) of those surveyed indicated that they would participate, while 113 (54%) indicated that they would not participate (Table 5).

Questions 10 and 11 were concerned with lack of knowledge as a reason for not participating. One hundred and twenty-five (57%) of those surveyed indicated that lack of knowledge was a legitimate reason for not participating in intramural activities. Ninety-six (43%) of those surveyed indicated that this was not a valid reason for not participating (Table 5). When asked, if they knew more about the activities being offered would they participate, 131 (60%) indicated that they would participate, while 89 (40%) indicated that they would not participate (Table 5).

Questions 12 and 13 were concerned with lack of skill as a possible reason for not participating. Of those surveyed, 80 (36%) indicated that lack of skill was a legitimate reason for not participating in intramural activities. One hundred and forty-one (64%) indicated that this was not a valid reason for not participating (Table 5). When asked if they would participate if there were informal non-competitive

Table 5

Reasons for Non-Participation

	Participation	
Reasons	Yes	No
Disinterest in activity	64 29%	156 71%
Lack of Knowledge	125 57%	96 43%
Inconvienent times	50 24%	162 76%
Academic Concerns	80 36%	141 64%
Lack of skill	80 36%	141 64%

leagues, 135 ((61%) indicated that they would participate, while 86 (39%) indicated that they would not participate.

Question 14 focused on academics as a reason for not participating in intramural activities. Eighty (36%) of those surveyed indicated that academic concerns were a legitimate reason for not participating. One hundred and forty-one of those surveyed indicated that this was not a reason for non-participation (Table 5).

Questions 15 and 16 addressed the issue of non-participation due to lack of interest in the activities being offered. Sixty-four (29%) of those surveyed indicated that they did not participate due to a lack of interest in the activities offered, while 156 (71%) indicated that this was not a reason for non-participation (Table 5). When asked if activities that interested them were offered would they participate, 164 (74%) of those surveyed indicated that they would participate. Fifty-seven (26%) indicated that they would still not participate (Table 5).

Comparison of Results

The first research question in this study addressed the issue of whether or not there has been a change over the past five years in the percentage of females

who participate in intramural activities at Virginia Tech. The 1984 results stated that 140 (35%) of those surveyed participated in intramural activities. Two hundred and fifty-eight (65%) indicated that they did not participate. In the 1990 study, it was found that 178 (45%) female students did participate in intramural activities, while 221 (55%) indicated that they do not participate in intramural activities (Table 6). From this data a comparison can be made in terms of percentages of those surveyed. According to this study, there has been an increase from 35% to 45% of female students who participate in intramural activities at Virginia Tech. These figures indicate that the answer to the first posed research question is yes; over the past five years there has been a 10% increase in female participation.

To better understand some of the differences in the 1984 sample and the 1990 sample, it is useful to examine and compare the subjects of each sample based on class status and place of residence. In the 1984 sample, of the 126 (32%) freshmen, only 11 (9%) participated in intramural activities. In the 1990 sample, of the 103 (26%) freshmen, 26 (25%) indicated that they did participate (Table 7). Overall there were 23 less freshmen surveyed in the 1990 study.

Table 6

Comparison of Responses of Participation

	1984	1990
Participation		
Yes	140	178
	35%	45%
No	258	221
	65%	55%

Table 7

Comparison of Responses of Yes to Participation by Class Status

	Class Status				
	F	S	Jr.	Sr.	Gr.
1984	9%	38%	48%	60%	27%
1990	25%	43%	53%	55%	71%

Of the 105 (26%) sophomores surveyed in 1984, 40 (38%) indicated that they did participate in intramural activities. In the 1990 study, of the 106 (27%) sophomores surveyed, 46 (43%) indicated that they did participate (Table 7).

In the 1984 study, the junior class was represented by 90 (23%) subjects and of those subjects 43 (48%) indicated that they did participate in intramural activities. In the 1990 study, 86 (22%) of those surveyed were juniors. Forty-six (53%) of those surveyed indicated that they did participate in intramural activities. In the 1984 study, 64 (16%) of those surveyed were seniors. Forty-two (60%) of the seniors indicated that they did participate in intramural activities. In the 1990 study, 87 (22%) of those surveyed were seniors. Forty-eight (55%) of those seniors indicated that they did participate (Table 7).

There were only fifteen (4%) graduate students who participated in the 1984 study. Of those graduate students only four (27%) indicated that they participated in intramural activities. In the 1990 study, 17 (4%) graduate students were involved in the surveying process. Of those 17 surveyed, 12 (71%)

indicated that they did participate in intramural activities (Table 7).

Along with class status, it is helpful to compare place of residence between the two studies. In the 1984 study, of the total sample, 285 (71%) lived on campus, while 115 (29%) lived off of campus. In the 1990 study, of the total sample 217 (54%) lived on campus, while 183 (46%) lived off of campus.

The 1984 study found that of those students who were surveyed and lived on campus 69% did not participate, while 31% indicated that they did participate in intramural activities. The 1990 survey results found that of those students who lived on campus, 61% indicated that they did not participate, while 39% indicated that they did participate in intramural activities. This comparison reveals that there has been an increase in participation of those students who live on campus (Table 8).

It was found in the 1984 study that of those students who lived off of campus 56% did not participate, while 44% indicated that they did participate. In the 1990 study the figures indicated that of those students living off of campus, 49% did not participate while 51% indicated that they did

Table 8

Comparison of Responses by Place of Residence

Participation	On Campus	Off Campus
Yes (1984)	31%	44%
Yes (1990)	39%	51%
No (1984)	69%	56%
No (1990)	61%	49%

participate (Table 8). This comparison again reveals that there has also been an increase in participation of those students who live off of campus.

The second research question addressed the issue of whether or not the reasons for non-participation have changed over the past five years. Again, the comparisons made between the two studies are based on the percentage of responses given to the various survey questions. The first area addressed in the survey was that of inconvienent program times. In the 1984 study, 27% of those surveyed indicated that this was a reason for not participating in intramural activities. In the 1990 study, 24% indicated that this was a legitimate reason for not participating (Table 9). A comparison of this information shows that inconvienent program times did not seem to be a big factor in either study for those who did not participate.

The second area addressed in the survey was that of lack of knowledge as a reason for not participating. The 1984 study revealed that 55% of those who were surveyed failed to participate due to a lack of knowledge. In the 1990 study, the percentage of women who failed to participate due to a lack of knowledge was 57% (Table 9). When asked if they would participate if they knew more about the activities

Table 9

Comparison of Reasons For Not Participating

Reasons	1984	1990
Disinterest in activity	22%	29%
Lack of Knowledge	55%	57%
Inconvienent times	27%	24%
Academic concerns	48%	36%
Lack of skill	---	36%

offered, 54% from the 1984 study indicated that they would, while 60% from the 1990 study stated that they would participate in intramural activities. A comparison of this information reveals that lack of knowledge in both studies seemed to be an important reason for not participating.

Academic concerns were also included as a possible reason for female students not participating in intramural activities at Virginia Tech. In 1984, it was found that 48% of those surveyed did not participate due to academic reasons (Table 9). In the 1990 study, 36% of those surveyed did not participate due to academic concerns (Table 9). A comparison of this information suggests that academics over the past five years has become somewhat less of a reason for not participating in intramural activities. However, it should be noted that this was one of the top reasons for not participating in both studies.

Disinterest in the activities being offered was the next area addressed in both studies. In 1984, it was found that only 22% of those surveyed indicated this as a reason for not participating (Table 9). In the 1990 study, 29% of those surveyed indicated that this was a legitimate reason for not participating (Table 9). A comparison of this information reveals

that there has been an increase of 7% in this area as a reason for not participating. However, in both studies it was indicated that if activities were offered that interested the subjects, they would participate.

Competitiveness was another area addressed in both studies, although this was one of the questions in the present study that was altered. In the 1984 study only 12% of those surveyed indicated that this was a reason for not participating (Table 9). When asked if they would participate in non-competitive or informal leagues, 35% indicated that they would participate.

In the present survey there was not a question that directly asked if this was a reason for not participating. However, there was a question that referred to participation if there were informal non-competitive leagues. Sixty-one percent of those who did not participate in intramural activities indicated that they would participate if there were informal or non-competitive leagues. While competitiveness may not be a factor for those who do not participate, informal leagues did appeal to a large portion of those surveyed.

In the 1990 study, lack of skill was addressed as a possible reason for not participating. This question was added based on the recomendation of by Linda Knight

in 1984. Thirty-six percent of those surveyed indicated that this was a reason for not participating in intramural activities. This was one of the top three reasons given for not participating, which indicates that is an important concern for female students on the Virginia Tech campus.

The findings in both studies were fairly consistent with each other in terms of reasons for not participating. The top reason given was that of lack of knowledge. Academic interests were the second biggest concern for those students who were surveyed in both studies. Lack of skill, which was only addressed in the 1990 study, was also a top concern. Disinterest in the activities offered and inconvienent program times complete the bottom of the list of reasons for not participating. After comparing this information from both studies the second research question can be answered the reasons given for not participating have basically remained the same over the past five years.

Survey Analysis

Upon completion of any survey it is useful to evaluate the survey process and the survey itself. In this study, the actual distribution of the survey went

very well and was completed in one full day. The locations chosen proved to be effective in terms of providing a balanced sample. Each class, with the exception of graduate students, was evenly represented in the total sample. There was also a fairly close balance of both on and off campus students, which was not the case with the 1984 study.

The author believes that the survey itself is not as effective as it could be. The major weakness in the survey is the wording of the questions. In questions 8 through 16 double negatives are used repetitively. This caused some confusion for the subjects when taking the survey and may have in turn affected how the subjects responded. An example of a question that caused some confusion is: "Do you not participate in intramural sports because you have no interest in the activities being offered?" In retrospect a less confusing wording could have been: "Do you think that a lack of interest in intramural activities has kept you from participating?" Respondents to the survey further suggested that "maybe" could be added as a possible option for the questions that ask "Would you participate if...?"

Summary

The present study involved 400 female students at Virginia Tech. It was a replication of a study conducted in 1984 by Linda Knight. A survey was used to obtain the data necessary for answering the two research questions posed in the first section. The data were analyzed by frequency distributions and cross-tabulations.

The sample consisted of 26% freshmen, 27% sophomores, 21% juniors, 22% seniors, and 4% graduate students. The junior and senior classes had the largest representation of participants with 53% and 55% respectively. Only 25% of the freshman surveyed indicated that they participated in intramural activities. Of the graduate students surveyed, 71% indicated that they had participated in intramural activities.

Fifty-four percent of the female students surveyed claimed that their place of residence was on campus. Forty-six percent indicated that they lived off of campus. Of those who lived on campus, 61% did not participate in intramural activities. Of those who lived off of campus 49% did not participate. This suggests that those students who live on campus are less active in intramural activities.

When examining the areas of participation, 80% of those who indicated that they did participate were involved in the team sports area. The major reason given for participating was "for fun", 48%. Physical exercise was the second biggest reason given for participating, 28%. It should be noted that of the 178 female students who indicated that they did participate, not one person gave awards as a reason for participating.

A lack of knowledge, in both studies, seemed to be the biggest factor for not participating. In 1984, 55% of the non-participants did not participate due to a lack of knowledge, while in 1990 this percentage increased to 57%. It is encouraging, however, to find that overall participation has increased over the past five years, especially in the area of freshman participation. This has increased from 9% in 1984 to 25% in 1990. However, there is still a large portion of female students at Virginia Tech who do not participate and 57% of those give lack of knowledge as a major reason for not participating.

CHAPTER FIVE

Conclusions and Recommendations

Conclusions

After the analysis of the data from both the 1984 study and the 1990 study, the following conclusions were drawn. A comparison of the findings of this study to the 1984 study suggest that:

1. There has been a 10% increase of female participation in intramural activities over the past five years. The percentage of female participation went from 35% in 1984 to 45% in 1990. This increase could be due to a committment from the Recreational Sports staff to better meet the needs of the total student population.

2. It is possible that there is a better overall balance of female students participating in intramural activities in terms of class status. More freshmen are participating, increasing from 9% in 1984 to 25% in 1990. There were increases in female participation in all classes except for seniors.

3. The main reason given for not participating, in both studies, was a lack of knowledge of the activities offered. Concern for academics was also a major reason given for not participating. Additional reasons given,

but received very little support, were inconvienent program times and disinterest in activities.

4. In both studies, it was indicated that if more information were made available about the activities being offered, more female students who do not participate would participate.

5. Not one person gave awards as a reason for participating. This is a positive reflection of Recreational Sports in that it does not use awards as a motivational factor in its programming.

Recommendations to Recreational Sports

The following recommendations have been made based on the analysis of data and review of procedures from both studies.

1. More effort and attention needs to be placed on the publicity and marketing of Recreational Sports programming to the female population.

2. A marketing strategy should be developed to determine the interests and needs of the female students at Virginia Tech.

3. Informal leagues should be developed and offered to female students. These leagues would include all major sports and some individual and dual activities.

Further Analysis

1. In the future, further manipulation of the raw data from the 1990 survey can be done. For instance, the relationships between the female students who did not participate and the variables of class status, place of residence, inconvienent program times, disinterest in activities, lack of knowledge, lack of skills, and academics can be further analyzed.

2. A new survey should be developed which is more effective in terms of the wording of the questions.

3. A follow-up study should be conducted in another four to five years to see if female participation continues to increase.

4. A marketing plan should be developed for Recreational Sports to determine how best to disseminate information to Virginia Tech female students.

5. Research should be conducted, in which comparisons are made between female participation rates at Va. Tech and female participation rates at other universities of comprable size.

References

Bialeschki, M. D. (1988). Why students don't play in intramurals? NIRSA Journal, 12, 46-48.

Bishop, C. (1977). Potpourri: the women's im open. Proceedings of the 28th Annual National Intramural Recreational Sports Association, 120-123. Boutilier,

M. A. & SanGiovani, L. (1983). The Sporting Woman. Champaign, IL: Human Kinetics.

Chestnutt, J. T., Nadeau, P. J., & Taylor, W. (1984). An analysis of non-participation in campus recreational sports activities. Proceedings of the 35th Annual National Intramural Recreational Sports Association, 93-101.

Colgate, J. A. (1978). Administration of Intramural Recreational Activities. New York: Wiley Henderson,

J. (1988). [NIRSA marketing survey]. Unpublished raw data.

Knight, L. A. (1984). Why women do not participat in intramurals. Unpublished masters thesis, Virginia Tech, Blacksburg, Virginia.

Lenskyj, J. (1986). Out of Bounds: Women, Sport, and Sexuality. Toronto, Ontario: Women's Press.

Kaplan, J. (1979). Women and Sports. New York: The Viking Press.

Mull, R. F., Bayless, K. G., & Ross, C. M. (1983). Recreational Sports Programming. N. Palm Beach, Fla: The Athletic Institution.

Yeagle, S. D. (1989). [Team summary reports]. Unpublished raw data.

APPENDIX A

Intramural Participation Survey

1. Class Status: 1-Freshman 2-Sophomore 3-Junior 4-Senior 5-Graduate Student

2. You live: 1-On Campus 2-Off Campus

3. Have you ever participated in intramural sports (team or individual sports) while attending Va. Tech? 1-Yes 2-No

If your answer to question number 3 is yes, please answer questions 4-6. If your answer to question number 3 is no, please answer questions 7-17.

4. Did you participate in intramural sports in the fall? 1-Yes 2-No

5. Did you participate intramural sports in the winter? 1-Yes 2-No

6. What is (was) your main reason for participation in intramural sports? 1-physical exercise 2-competition 3-to meet people 4-fun 5-to relax 6-to be with friends 7-it is mandatory 8-awards 9-other

7. Did you not participate in intramurals because the intramural program is at an inconvienent time? 1-Yes 2-No

8. If times were more convenient would you participate? 1-Yes 2-No

9. If your answer to questions 7 and 8 were yes, what sport would you play: 1-flag football 2-flickerball 3-volleyball 4-innertube water polo 5-basketball 6-softball 7-water basketball 8-soccer 9-team handball

10. Do you not participate in intramurals because of insufficient knowledge about activities (publicity)? 1-Yes 2-No

11. If you knew more about events being offered would you participate? 1-yes 2-No

12. Do you not participate in intramurals because of the competitiveness involved with the intramural program? 1-Yes 2-No

13. If there were non-competitive leagues would you participate? 1-Yes 2-No

14. Do you not participate in intramurals because you feel your academics would suffe? 1-Yes 2-No

15. If intramurals were less time consuming, would you participate? 1-Yes 2-No

16. Do you not participate in intramurals because you are not interested in the activities offered? 1-Yes 2-No

17. If the intramural program offered activities that were interesting to you, would you participate? 1-Yes 2-No

APPENDIX B

Recreational Sports Participation Survey

1. Class Status: 1-Freshman 2-Sophomore 3-Junior 4-Senior 5-Graduate Student

2. Residence: 1-On Campus 2-Off Campus

3. Have you ever participated in any type of intramural sports at Va. Tech, this would include individual and dual activities? 1-Yes 2-No

If your answer to question number three is YES, please answer questions 4-6. If your answer to question number 3 is NO, please answer questions 8-16.

4. Did you participate in intramural sports in the fall? 1-Yes 2-No

5. Did you participate intramural sports in the winter? 1-Yes 2-No

6. Which area (team sports, individual/dual), did or do you participate in? 1-Team Sports 2-Indiv./Dual 3-Both

7. What is (was) your main reason for participation in intramural sports? 1-Physical Exercise 2-Competition 3-To Meet People 4-Fun 5-To Be With Friends 6-Awards 7-Other

8. Do you not participate in intramural sports because of inconvienent program times? 1-Yes 2-No

9. Would you participate in intramural sports if times were more convenient for you? 1-Yes 2-No

10. Do you not participate due to lack of knowledge about activities being offered? 1-Yes 2-No

11. If you knew more about events being offered would you participate? 1-yes 2-No

12. Do you not participate in intramural sports because of lack of skills? 1-Yes 2-No

13. Would you participate if there were informal, non-competitive leagues? 1-Yes 2-No

14. Do you not participate in intramural sports because of academic reasons? 1-Yes 2-No

15. Do you not paticipate in intramural sports because you have no interest in the acitivites being offered? 1-Yes 2-No

16. If the intramural programs offered activities that were interesting to you, would you participate? 1-Yes 2-No

APPENDIX C

Tally Sheet

1. Not enough time: _____

2. Not interested: _____

3. Disklike intramural activities: _____

4. Dislike surveys: _____

5. Other: _____

Total _____

VITA

Shellie Greenman was born to Bill and Joan Greenman, November 14, 1965 in Asheville, North Carolina. She grew up in Blacksburg, Virginia where she graduate from high school in 1984. Upon completion of high school she attended Emory and Henry College, where she received her B. A. degree in health and physical education in 1988. During her college career, Shellie was a member of the Emory and Henry Women's basketball team and was an active member in a local sorority, Alpha Beta Chi.

After graduation from college, Shellie decided to pursue a masters' degree from Virginia Tech, in Sports Management. During her graduate study, Shellie worked as a graduate assistant in the Recreational Sports Office. Shellie was also a Volunteer Assistant for the Virginia Tech Women's Basketball team for two years.

Shellie enjoys sports of all kinds, especially basketball. She loves music, going to the movies, and most of all going to the beach. Her plans for the future include pursuing a career in coaching collegiate basketball.

Shellie A. Greenman

Shellie A. Greenman