# PARTICIPATION TRENDS IN INTRAMURAL SPORTS IN TEXAS AND OKLAHOMA 

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## CHAPTER I

## INTRODUCTION

"The purpose of intramurals is not to win or lose; the goal is participation"

> (Farrell 1999)

From the professional standpoint, the goal has been the same, participation. Whether the program was large or small, in a small school or large university, the foundation for basic evaluation of successful programming is participation. Wide varieties of traditional and non-traditional sports are offered in an effort to attract diverse and excited groups. Intramural sports has to do with the fun, release of stress, joy of teamwork, thrill of competition, opportunity to escape the monotony of everyday life, and the emotional arousal that puts participants on the intramural fields and into recreational programs (Pauley 1995). Each and every year professionals from all around the nation come together at conferences and events, speak on the phone, communicate through email, and many other ways and the topic is often the same, participation.

Research documenting the benefits of participation in recreation is abundant; yet each year many recreation professionals are still asked to justify the need for recreation programs in the community and university settings. The assessment used to justify such programs has often been the number of participants taking part in the programs offered (Hupp and Rinaldi 1991). What do these numbers truly represent? Are campus recreation
programs really attracting and affecting enough individuals? With the number of students enrolled in universities constantly increasing (Gose 1995; U.S. Department of Education 2002), are the campus recreation programs growing with the population or struggling to meet the needs of that population?

Examining the current issues and planning for the future is something that is important to any profession (Young and Ross 2000). Some argue that "there is not currently a conclusive method to assess any campus recreation program" (James B. Lewis, Robert Barcelona et al. 2001). In recent years software has been utilized to provide a more accurate measurement of participation, but methods to gain information pertaining to quality of life or satisfaction still prove difficult.

Many institutions across the United States have recently built or are in the planning process for new or expanded recreational facilities so the need for justifying the merit of such facilities along with programs continues to be a pressing and real issue for many in the field of recreation. According to information listed on the National Intramural-Recreational Sports Association's (NIRSA) website more than $\$ 1.5$ billion has either recently been spent or approved to be spent on new and improved facilities at NIRSA member schools. These facilities, which can be multimillion dollar projects, can have positive effects on student recruitment and while also giving a source of pride and a place for students to unite (Kennedy 2005), but the programming within such facilities still needs to be funded and supported by the university for the greatest effect on the university population.

Are campus recreation programs effectively recruiting students to be a part of the programs so that the university and its students can experience the benefits of the
program? Or are these programs unable to keep up with the increased number of students coming on to campuses each year? The purpose of this study will be to determine if university recreation programs are growing at a rate equal to or greater than the growth experienced by the university over the same time period. Even though many programs are experiencing growth and greater numbers than before (Doll 2007; Jackson 2007; McCauley 2007; Mills 2007), is this a result of programming or a result of the university bringing more students to campus who in turn cause numbers to increase?

## Definitions

In order to fully understand the philosophies and programming of campus recreation the following are some useful terms.

- Intramural - competition only within the student body (Merriam-Webster 2007). Intramural actually means 'within the walls' of a single institution. Intramurals often refer to the sports participated in by students while on their campus. These programs often allow students the opportunity to participate with groups they are a part of against other organizations or communities on campus.
- Extramural - existing or functioning outside or beyond the walls, boundaries, or precincts of an organized unit (as a school or hospital) (Merriam-Webster 2007).
- Extramural events are hosted around the nation annually and offer participants the chance to compete against students from other schools in events that are typically of the intramural nature. These events often offer chances to advance to national competition and offer such awards as trips to theme parks and cities that offer recreation outside of the sport that is being played.
- Recreational - of, relating to, or characteristic of recreation (Merriam-Webster 2007).
- Recreation - voluntary non-work activity that is organized for the attainment of personal and social benefits including restoration and cohesion (Kelly 1996)
- Campus recreation - refers to the recreational offerings of a university or institution. It is a broad term used to describe the programming offered to the university community.
- Participation - the act of participating (Merriam-Webster 2007).
- Participate - to take part (Merriam-Webster 2007).
- Major sport - a term used by recreational professionals to refer to traditional sports that often attract large number of participants. "Major" sports for this study will include soccer, volleyball, basketball, flag football and softball.
- Minor sport - a term used by recreational professionals to refer to sports with lower levels of participation, often individual events.
- Professional - having a particular profession as a permanent career (MerriamWebster 2007). For use in this study a more specific definition of professional will be any graduate assistant, intern or full time employee whose primary responsibility is the administration of intramural sports. It is the hope of the researcher that universities meeting this definition will show a lower rate of turnover, which will hopefully result in better record keeping when compared to a program with only one professional


## CHAPTER II

## REVIEW OF LITERATURE

History

From the very young years of Intramural Sports and the National Intramural Association, the face and perception of intramurals and campus recreation has changed greatly. In 1950, William Wasson organized twenty-two intramural directors from historically black colleges to gather at Dillard University in New Orleans to form the National Intramural Association (NIA). By the time of the third annual conference the organization had become interracial and changed their name to the National Intramural and Recreation Association. This name remained until 1959 when the membership voted to drop "Recreation" from the name.

Over the following decades the association continued to grow while adopting a constitution, adjusting to an ever changing membership, providing job placement services, and trying to promote intramurals and recreation around the country. In 1959, women were removed from the membership. This policy lasted only until 1971 when the membership voted to allow women to join again. In 1972, the first job placement services were offered at the national conference. Every national conference now has a constant buzz of young professionals interviewing for jobs and finding information at the Career Opportunities Center. By 1975, NIA had voted to change the name once again to the
name that is still currently in use, National Intramural-Recreational Sports Association (NIRSA). NIRSA has continued to improve and develop the groundwork and structure first laid by the NIA while adding more services and growing to a much larger organization.

NIRSA began publishing the NIRSA Journal in 1977, which in 2001 became the Recreational Sports Journal, that all members can use as a resource to stay up to date with the practices of other universities and the research of other professionals in the field of recreational sports. NIRSA has developed many classes and certification programs including Certified Recreational Sports Specialist (CRSS) and the School of Recreational Sports Management while also creating conferences and symposiums for more specialized areas within recreational sports such as aquatics, outdoors, and facilities. The membership has expanded from the original twenty-two members to nearly 4,000 members on more than 700 campuses and universities along with other institutions including military and public parks. Each year approximately 2,000 members participate in the Annual Conference and Expositions where more than 70 educational sessions are available, and the opportunity to discuss new ideas and programs is always a hot topic.

NIRSA member schools now are proud to provide programs for approximately 11 million students. Each year more than 1.1 million intramural contests are scheduled and over two million individuals participate in sport clubs offered on campuses. Beyond the opportunity to participate on campus is the chance for a student to represent their university on a regional and even national level through Extramural Championships in flag football, fitness and training, and basketball. Many of these Extramural Championships also offer the opportunity for student development as officials come
together to learn more about officiating sports and compete against each other for the opportunity to attend events such as college level officials' clinics which can lead to career opportunities for young talented officials in a sport. NIRSA is an excellent example of how a small group of people can have a great effect on many individuals and over a long period of time. (http://www.nirsa.org/about/cd_history 2006)

## Philosophy

Campus recreation is a program and group of services within a college or university that is ever changing with many different philosophies and participants. From program to program and even participant to participant a recreation professional needs to often adjust and reconsider philosophies to fit each situation. A common theme that many researchers have been able to find is that participation in campus recreation can have benefits for users.
"Recreational sports professionals have good cause to believe and profess that the programs they administer positively contribute to the education and well-being of students" (Snodgrass and Tinsley 1990)

It has also been found that recreational sports can improve fitness through lifetime activities (Politino 1987) and involvement in these same lifetime activities during the years of early adulthood can increase lifelong participation since the best predictor of future behavior is the past behavior of the same person (Roberts 2002). Roberts also states that almost all participants who participate in activities regularly between the ages of 16-30 will become "locked in" to the activities in which they participate. Using this information, intramural sports and campus recreation programs can be very useful
avenues in helping individuals begin a lifetime of physical fitness through the diverse and unique programs offered on campus.

Many intramural programs try to offer a wide variety of sports and activities, both competitive and non-competitive, in order to capture the attention of as many individuals as possible. Some institutions, including Oklahoma State University, go as far as to offer programs using video game systems, dominoes, or Texas Hold 'em poker in an effort to increase the number of people who visit the Campus Recreation Center. The hopes of programs when offering such non-traditional events is to get new users involved in the recreation program with the hope that they may find other people or other activities to encourage a return (Ahlum 2005). While these activities may not increase the level of fitness or promote a lifetime of involvement it is the hope of programmers that something else may.

Many other programs try to draw more participation with the philosophy of "Memorable Moments". Stobart and Lin (2000) came to the conclusion that if students have a positive attitude toward a recreational program they or a friend have had memorable experiences with that program. This philosophy is discussed in depth by David Gaskins and Todd King in their article Creating "Memorable Moments" to Excite the Intramural Sports Experience. "Memorable Moments" are described as those intangible elements that include enjoyment or exhilaration, personal value, and something that is atypical or out of the ordinary.

While the idea is simple, programmers are encouraged to create an atmosphere in which lasting memories can be made; there are some programs around the nation that still do not buy in to the idea. Gaskins and King discuss doing things such as using the
university's varsity sports arenas for championship play, public address systems, coverage in campus media, special promotions, pictures or videos, playing of the National Anthem or other similar efforts to give the event a little extra emotion and energy. By doing these little extras for games at a recreation event the feeling of connection may increase making a "Memorable Moment". The opportunity for a college student to play on the same court or field as the varsity athletes of their alma mater is often a one time chance that many students will not soon forget. If something as simple as putting forth the extra effort to make a game seem more important can increase the excitement around a program and possibly get more people to want to become involved than by all means this is something recreation professionals should take notice of.

## Benefits

In a survey of 11,076 freshman students at a university, researchers found that the students who utilized the recreation facilities had a better retention rate than those who did not. These same students also had slightly higher GPAs and earned more credit hours by the end of their first year in school (Belch, Gebel et al. 2001). Similar to campus recreation programs wanting to see increased numbers of participants, universities enjoy seeing the retention rate stay high also. Many conversations among individuals involved in higher education turn to how to retain students once they arrive on campus. According to another source, the successful transition for first year students will often hinge on how successfully they will be able to transfer athletic experiences into their new campus life (Berry and Doughtery 1996). The more prominent a school's recreational and fitness facilities are on campus, the more likely new students will be to find these venues and utilize all that they have to offer. Through finding these programs and facilities, each
student will hopefully connect to similar minded people and hopefully increase their sense of community and connection to the university.

One of the final prominent benefits discussed in literature was an increase of selfesteem among users of recreation programs. A positive relationship is present between students who participate in recreation activities and self-esteem (Collins, Valerius et al. 2001). This same study also showed that individuals who indicated that participation in sports, leisure, or recreation was not of high importance also had the lowest self-esteem scores in the sample. At the same time the group of students who indicated that participation was of the highest importance to them had the highest self-esteem scores in the sample. Ellis, Compton, Tyson, and Bohlig (2002) also found that not only does participation in recreation programs have a positive effect on self-esteem and quality of life, but the more frequent the participation the greater the benefits. This research found that the more frequent users of recreation programs reported a greater quality of life than their less frequent counterparts. Kanters (2000) also found that students who are physically active showed less anxiety during exam periods and often also had less anxiety during the baseline period as well.

Many of these benefits are often obvious to people, but one aspect that often gets forgotten when discussing campus recreation is student development. There are many avenues for students to continue their development through both employment and participation in almost every recreation program available. Recreation programs often give students a way to develop how they deal with the stresses and pressures they encounter in college life (Kanters 2000). Intramurals can also help reinforce standards of moral conduct through use of sportsmanship policies and consequences ranging from
suspensions to expulsions (Rothwell and Theodore 2006). Intramurals is often also a setting where peers have a major impact on the values for a team. The actions of any team member often reflect the values of the whole team and many people do not want to be associated with such actions. At the same time values can also be reaffirmed with positive reinforcement from spectators, team members, opponents, and staff. It was also found that the more prolonged the length of participation the greater affirmation will occur (Rothwell and Theodore 2006). Through the tools found to be effective in value clarification and stress reduction it is easily understood how intramural participation can greatly help a young college student develop into a mature adult through their experiences on the recreational sports fields. Another avenue for student development is the employment opportunities for students through the recreational sports programs. Many different employment opportunities exist that each have their own unique ways to shape and mold a young college student. The opportunities range from equipment check out to intramural sports official to even certified personal trainers or lifeguards. Part-time student employment is intended to be a participatory, team oriented, developmental learning experience that allows students to gain knowledge and skills such as customer service, time management, communication, collaboration, and leadership. These employment opportunities also show a positive correlation between employment and academic success (Hackett 2007).

## Justification

The method used by most professionals in campus recreation to justify programs and facilities is reporting the number of participants participating in the programs (Hupp and Rinaldi 1991; James B. Lewis, Robert Barcelona et al. 2001). While this method can
often be accurately used to keep track of quantitative records the qualitative aspects of the program are not addressed. These numbers have been able to satisfy many critics while also helping the members of NIRSA to build or begin planning for the $\$ 1.5$ billion in facilities around the nation (http://www.nirsa.org/about/cd_history 2006). However as time and criticism continues, professionals need to find new ways to justify their programs and facility needs.

Another method that some professionals have started to utilize is measuring satisfaction and quality of life (James B. Lewis, Robert Barcelona et al. 2001). Problems with this method of measurement abound in among campus recreation professionals alone. Defining such qualities proves to be almost as difficult as measuring these qualities. Since objective measures of quality of life are limited to the physical benefits and level of fitness it is very hard to make a measurement of these qualities. The true benefit of the improved quality of life is often subjective. It is suggested that campus recreation professionals, in order to start to measure aspects of quality of life, start by asking questions to the participants. Questions such as, why are campus recreation programs important? The findings of these professionals were that unfortunately there is not a conclusive method for measuring quality of life or even the campus recreation programs. NIRSA has been making efforts to assess the satisfaction of users both before and after they use recreation centers. Outside of this ongoing research the amount of shared information on this topic is quite limited (James B. Lewis, Robert Barcelona et al. 2001).

Even with limitations in research and data collection there has been steady and rapid growth and increased emphasis on campus recreation programs and these programs
have experienced significant improvements. The programs gaining the most emphasis are intramurals and open recreation. In a survey given to campus recreation directors at NIRSA schools $65 \%$ of directors indicated that they place a strong emphasis on intramurals while $47 \%$ of directors also placed a strong emphasis on open recreation (Dr. William F. Stier, Schneider et al. 2006). These were also the two programs showing the greatest participation levels according to the same survey; the response for intramurals was that $37 \%$ of students frequently participated in intramurals while $47 \%$ frequently participated in open recreation.

## Barriers to Participation

With the well-documented evidence of the benefits from participation in campus recreation programs, it would be hard to believe that there would be a large number of students on every campus that do not try to reap the rewards that come with recreational participation. Unfortunately, research shows that women, non-traditional aged students, and students who live off campus do not participate with the same frequency as males who are living on campus. It was also found that despite the increase in popularity and the addition of new facilities the student effort to participate in the programs has remained constant over the year (Barcelona and Ross 2002). Recent studies have found that up to $74 \%$ of students are not participating in vigorous activity and as much as $42 \%$ are not participating in even moderate activity (Douglas, Collins et al. 1995; Rosen 2000). The largest constraint or barrier that research has found that prevents students from participating and taking full advantage of recreational offerings on campus is a perceived lack of time and lack of knowledge of what programs are being offered (Beggs, Elkins et al. 2005). It was also found that while women have a higher rate of satisfaction
when asked about their recreation experiences they still participate at a lower rate than males (Kovac and Beck 1997). What the researchers were able to find is that whether the barrier is real or just perceived in order to increase participation in programs recreation professionals should do what they are able to help students negotiate the barriers to enhance participation(Young and Ross 2000).

## Methodology

The method of research and data collection utilized in this study is based on the Dillman Total Design Method to create the greatest response from the pool of schools selected. The four areas of this methodology that provide a foundation are making the questionnaire simple with little burden, making communications personal, provide clear information about the survey, and follow up after the survey has been received. By making the survey simple with little burden more professionals should be willing to take the time away from their schedules to complete the information fully and accurately giving more accurate results. By using personal communications, instead of form letters, the intent of the design is to help the participants feel their participation is more important and their input highly valued. Providing clear information about the survey allows participants to fully understand what is being requested of them and how they are expected to respond to the survey. Follow up with participants may be the most important step to ensure the highest level of participation in the survey. While the same principles described by Dillman are used, the methods of distribution and follow up were modified for this study. All surveys were distributed by email communication and follow ups utilized email and telephone communications. In order to ensure the receipt of surveys by email, read receipt function were used so that the researcher was aware that the survey
had been received. By utilizing established networks within the state the researcher hoped that most participants would be willing to participate and provide data for the research. By utilizing existing relationships, the personal obligation encouraged a greater level of participation.

Through the use of the Dillman Total Design Method, a very accurate and high response rate (at least 75\%) may be attained. In order to improve the response rate the researcher will focus on a handful of areas previously explored by Dillman originally in 1978. While some of the methods that Dillman recommends may not be applicable in this survey, the areas the researcher focused on are personalization of correspondence, follow up reminders, timing of follow ups, and questionnaire layout and length. By surveying the sample population on a subject they may be interested in, the researcher also hoped to increase the perceived reward that each member of the sample population has with the survey. All survey recipients received a follow up communication within one week of the initial survey; non-respondents received replacement surveys after four and seven weeks if results were not received. Due to the size of the sample population, the researcher used telephone communications as a follow up with the replacement survey that were sent four weeks after initial mail out. It was also the hope of the researcher that the use of electronic mail would increase response rate rather than going through United States Postal Service (Dillman 1991).

## CHAPTER III

## METHODOLOGY

## Hypothesis

It is the belief of the researcher that while enrollments in universities have increased over recent years that participation in intramural sports have also increased but at a greater rate than enrollment. While many universities have experienced an increase in numbers of enrolled students, many recreation programs have benefited not only from the increase in students on campus but also from a greater emphasis on participation and campus involvement that was reflected in the review of literature. Other factors that may have helped intramural sports programs to gain momentum and experience greater increases could be the presence of new facilities and a growing trend to offer more nontraditional sports in an effort to get more participants involved in all programs.

Close attention was paid to each individual sport while also comparing the level of participation in programs as a whole. Comparisons were made to see if any sport is increasing in participation at a rate greater than other sports offered through Intramural programs.

## Design

In order to reach a conclusion on the above hypothesis, a survey (Appendix A) was used to gather data on team totals for the time period of Fall 2002 until Spring 2007.

This sample was selected from major and well established university recreation programs within Texas and Oklahoma in the hopes that these universities would be able to provide the most accurate records for their programs over the specified time. The programs that were targeted were any intramural sports program that has two or more professionals with a primary responsibility of intramural sports on their campus. The definition of professional as used in this study was: any graduate assistant, intern or full time employee whose primary responsibility is the administration of intramural sports. It was the hope of the researcher that these universities would show a lower rate of turnover which will hopefully result in better record keeping when compared to a program with only one professional. The theory behind this assumption is that if the lone administrator were to leave the employ of a given college or university, many records may be misplaced or lost in the turn over to a new administrator that may be avoided if at least one professional staff member is returning the following year. Qualifying programs were found through the NIRSA Directory and by prescreening programs by telephone. By using schools within a tight, well connected network such as the one that exists within the states of Texas and Oklahoma, qualifying schools that are not listed in the NIRSA Directory were also possible inclusions in the sample. Since being a NIRSA member school is not a determining factor in size or quality of program the researcher did not limit schools that do not have memberships; all schools meeting the defined requirements were included regardless of membership status.

This survey was distributed through email to the prospective professionals with a request for their help by providing the number of teams they had participating during the time frame designated for "major" team sports in their program. The "major" team sports
were designated as the traditional team sports that are common to many programs and included soccer, volleyball, basketball, flag football and softball. Each professional also received a follow up call within one week of the email being distributed to discuss the research and answer any questions that arose as a result of the request.

While the data were collected from the recreational programs, the researcher contacted the prospective schools to gain enrollment data for the same time period that has been requested.

After all data were collected, an analysis of the numbers was conducted through the use of mathematical percentage increase from year to year and from beginning to end to see which set of data is more rapidly increasing and search for any significant relationships in the data. The data were also be graphed so the rate of change may be more easily viewed. This analysis occurred for each of the schools and for the sample as a whole, both by sport and by total number of teams enrolled for the time period.

## CHAPTER IV

## FINDINGS

## Data Presentation

Through use of the survey, data from thirteen institutions in Texas and Oklahoma were collected. Participating schools were The University of Texas at Austin, University of North Texas, University of Houston, Southwestern University, Texas Tech University, Texas Christian University, Angelo State University, Stephen F. Austin University, Oklahoma State University, Texas A\&M University, the University of Texas at Arlington, Tarleton State University, and Sam Houston State University. Recreational professionals from these institutions provided the data illustrated in Appendix B. Stephen F. Austin University did not have records prior to the 2005-2006 school year, while Sam Houston State University could not provide records of participation for the 2002-2003 school year. All other programs were able to provide complete data for analysis for the time period being analyzed. It was the decision of the researcher to continue to include the incomplete data sets in the analysis since both schools were able to provide multiple years which allowed the researcher to still analyze the changes in participation each of these programs had experienced for the years data was available. Below are the numbers from the surveyed institutions:

Table I
University of Texas at Austin

| Participation <br> Numbers by Team | $2006-2007$ | $2005-2006$ | $2004-2005$ | $2003-2004$ | $2002-2003$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Flag Football | 416 | 403 | 390 | 418 | 413 |
|  |  |  |  |  |  |
| Soccer | 199 | 176 | 173 | 159 | 155 |
|  |  |  |  |  | 1763 |
| Volleyball | 194 | 177 | 207 |  | 176 |
|  |  |  |  | 502 | 501 |
| Basketball | 502 | 485 | 502 |  |  |
|  |  |  |  | 301 | 307 |
| Softball | 297 | 283 |  |  |  |
|  | 1608 | 1524 | 1573 | 1584 | 1531 |
| Total |  |  |  |  |  |

Table 2
University of North Texas

| Participation <br> Numbers by Team | $2006-2007$ | $2005-2006$ | $2004-2005$ | $2003-2004$ | $2002-2003$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Flag Football | 110 | 102 | 100 | 91 | 95 |
|  |  |  |  |  |  |
| Soccer | 83 | 61 | 62 | 54 | 58 |
|  |  |  |  |  |  |
| Volleyball | 73 | 61 | 57 | 53 | 61 |
|  |  | 103 |  | 88 | 97 |
| Basketball | 74 | 71 | 70 | 67 | 99 |
|  |  | 398 | 377 | 362 | 50 |
| Softball | 448 |  |  |  | 363 |
|  |  |  |  |  |  |

Table 3
University of Houston

| Participation <br> Numbers by Team | $2006-2007$ | $2005-2006$ | $2004-2005$ | $2003-2004$ | $2002-2003$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Flag Football | 54 | 58 | 48 | 42 | 47 |
|  |  |  |  |  |  |
| Soccer | 28 | 23 | 24 | 28 | 39 |
|  |  |  |  |  |  |
| Volleyball | 45 | 36 | 40 | 34 | 37 |
| Basketball | 78 | 66 | 69 | 58 | 50 |
| Softball | 34 | 38 | 34 | 45 | 30 |
|  |  |  |  |  |  |
| Total | 239 | 221 | 215 | 207 | 203 |

Table 4
Southwestern University

| Participation <br> Numbers by Team | $2006-2007$ | $2005-2006$ | $2004-2005$ | $2003-2004$ | $2002-2003$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Flag Football | 27 | 22 | 26 | 31 | 28 |
|  |  |  |  |  |  |
| Soccer | 10 | 12 | 16 | 17 | 23 |
|  | 16 | 17 |  | 19 | 33 |
| Volleyball |  |  |  |  | 27 |
|  | 22 | 20 | 30 | 34 | 29 |
| Basketball | 17 | 19 | 29 | 19 | 25 |
|  |  |  |  |  |  |
| Softball | 92 |  | 120 | 134 | 132 |
|  |  |  |  |  |  |
| Total |  |  |  |  |  |

Table 5
Texas Tech University

| Participation <br> Numbers by Team | $2006-2007$ | $2005-2006$ | $2004-2005$ | $2003-2004$ | $2002-2003$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Flag Football | 416 | 395 | 356 | 393 | 360 |
|  |  |  |  |  |  |
| Soccer | 123 | 103 | 111 | 132 | 144 |
|  |  |  |  |  | 175 |
| Volleyball | 197 | 158 | 166 | 175 |  |
|  |  |  |  |  | 1367 |
| Basketball | 349 | 351 | 339 | 347 | 304 |
|  |  |  |  |  |  |
| Softball | 282 | 274 | 272 | 267 | 258 |
|  |  |  |  |  |  |
| Total | 1367 | 1281 | 1244 | 1314 | 1202 |

Table 6
Texas Christian University

| Participation <br> Numbers by Team | $2006-2007$ | $2005-2006$ | $2004-2005$ | $2003-2004$ | $2002-2003$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Flag Football | 103 | 90 | 86 | 73 | 70 |
|  |  |  |  |  |  |
| Soccer | 60 | 63 | 55 | 55 | 50 |
|  | 30 | 33 | 30 | 27 | 25 |
| Volleyball |  |  |  |  |  |
|  | 83 | 70 | 72 | 66 | 65 |
| Basketball | 40 | 34 | 33 | 42 | 32 |
|  |  |  |  |  |  |
| Softball | 316 | 290 | 276 | 263 | 242 |

Table 7
Angelo State University

| Participation <br> Numbers by Team | $2006-2007$ | $2005-2006$ | $2004-2005$ | $2003-2004$ | $2002-2003$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Flag Football | 115 | 71 | 73 | 56 | 60 |
|  |  |  |  |  |  |
| Soccer | 44 | 18 | 6 | 8 | 10 |
|  |  |  |  |  |  |
| Volleyball | 92 | 50 | 43 | 43 | 43 |
|  |  |  |  |  |  |
| Basketball | 141 | 106 | 84 | 60 | 50 |
|  |  |  |  |  |  |
| Softball | 165 | 142 | 76 | 72 | 51 |
|  |  |  |  |  |  |
| Total | 557 | 387 | 282 | 239 | 214 |

Table 8
Stephen F. Austin State University

| Participation <br> Numbers by Team | $2006-2007$ | $2005-2006$ | $2004-2005$ | $2003-2004$ | $2002-2003$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Flag Football | 96 | 72 |  |  |  |
|  |  |  |  |  |  |
| Soccer | 22 | 17 |  |  |  |
|  |  |  |  |  |  |
| Volleyball | 65 | 32 |  |  |  |
|  |  |  |  |  |  |
| Basketball | 53 | 37 |  |  |  |
|  |  |  |  |  | 0 |
| Softball | 79 | 61 |  | 0 |  |
|  | 315 | 219 |  | 0 |  |
| Total |  |  |  |  |  |

Table 9
Oklahoma State University

| Participation <br> Numbers by Team | $2006-2007$ | $2005-2006$ | $2004-2005$ | $2003-2004$ | $2002-2003$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Flag Football | 346 | 318 | 308 | 288 | 292 |
|  |  |  |  |  | 86 |
| Soccer | 109 | 87 | 82 | 88 |  |
|  |  |  |  | 151 | 140 |
| Volleyball | 180 |  |  |  |  |
|  | 321 | 313 | 298 | 293 | 3156 |
| Basketball | 214 | 226 | 222 | 195 | 184 |
|  |  |  |  |  |  |
| Softball | 1170 | 1100 | 1061 | 1004 | 1013 |

Table 10
Texas A\&M University

| Participation <br> Numbers by Team | $2006-2007$ | $2005-2006$ | $2004-2005$ | $2003-2004$ | $2002-2003$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Flag Football | 398 | 370 | 382 | 396 | 424 |
|  |  |  |  |  |  |
| Soccer | 227 | 184 | 179 | 174 | 195 |
|  |  |  |  |  |  |
| Volleyball | 182 | 177 | 208 | 204 | 207 |
|  |  |  |  |  |  |
| Basketball | 385 | 366 | 366 | 354 | 356 |
|  |  |  |  |  |  |
| Softball | 274 | 263 | 262 | 254 | 273 |
|  |  |  |  |  |  |
| Total | 1466 | 1360 | 1397 | 1382 | 1455 |

Table 11
University of Texas at Arlington

| Participation <br> Numbers by Team | $2006-2007$ | $2005-2006$ | $2004-2005$ | $2003-2004$ | $2002-2003$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Flag Football | 65 | 51 | 51 | 56 | 51 |
|  |  |  |  |  |  |
| Soccer | 43 | 50 | 30 | 26 | 35 |
|  | 45 | 40 | 47 | 31 | 44 |
| Volleyball |  |  |  |  |  |
|  | 85 | 65 | 65 | 77 | 79 |
| Basketball | 44 | 44 | 39 | 37 | 32 |
|  |  |  |  |  |  |
| Softball | 282 | 250 | 232 | 227 | 241 |
|  |  |  |  |  |  |

Table 12
Tarleton State University

| Participation <br> Numbers by Team | $2006-2007$ | $2005-2006$ | $2004-2005$ | $2003-2004$ | $2002-2003$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Flag Football | 80 | 75 | 74 | 74 | 80 |
|  |  |  |  |  |  |
| Soccer | 20 | 21 | 21 | 23 | 13 |
|  |  |  |  |  |  |
| Volleyball | 33 | 25 | 25 | 23 | 21 |
|  |  |  |  |  |  |
| Basketball | 54 | 42 | 44 | 50 | 36 |
|  | 100 | 97 | 91 | 94 | 82 |
| Softball |  |  |  |  |  |
|  | 287 | 260 | 255 | 264 | 232 |
| Total |  |  |  |  |  |

Table 13
Sam Houston State University

| Participation <br> Numbers by Team | $2006-2007$ | $2005-2006$ | $2004-2005$ | $2003-2004$ | $2002-2003$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Flag Football | 75 | 92 | 70 | 70 |  |
|  |  |  |  |  |  |
| Soccer | 35 | 33 | 34 | 22 |  |
|  |  |  |  |  |  |
| Volleyball | 41 | 38 | 39 | 27 |  |
|  |  |  |  |  |  |
| Basketball | 73 | 62 | 57 | 56 |  |
|  | 99 | 99 | 93 | 69 |  |
| Softball |  |  |  |  |  |
|  | 323 | 324 | 293 | 244 | 0 |
| Total |  |  |  |  |  |

The above numbers were analyzed and then presented as percentage change for each institution on a yearly basis and over the complete time period of the study. These changes were analyzed for each sport and for all sports combined for each of the institutions (Appendix C) and also as a region (Appendix D). The changes experienced in sports were compared to the changes in enrollment for the same time periods. The enrollment numbers that were discovered for each of the schools surveyed are listed here for each Fall and Spring semester beginning with Fall 2002 until Spring 2007.

Table 14
University of Texas at Austin Enrollment

| Fall '02 | 52,261 | Spring '05 | 47,444 |
| :---: | :---: | :---: | :---: |
| Spring '03 | 49,392 | Fall '05 | 49,791 |
| Fall '03 | 51,438 | Spring '06 | 46,545 |
| Spring '04 | 48,539 | Fall '06 | 49,738 |
| Fall '04 | 50,377 | Spring '07 | 46,993 |

Table 15
University of North Texas Enrollment

| Fall '02 | 30,183 | Spring '05 | 29,509 |
| :---: | :---: | :---: | :---: |
| Spring '03 | 29,035 | Fall '05 | 32,047 |
| Fall '03 | 31,065 | Spring '06 | 29,817 |
| Spring '04 | 29,313 | Fall '06 | 32,443 |
| Fall '04 | 31,155 | Spring '07 | 31,622 |

Table 16
University of Houston Enrollment

| Fall '02 | 34,443 | Spring '05 | 33,066 |
| :---: | :---: | :---: | :---: |
| Spring '03 | 33,116 | Fall '05 | 34,582 |
| Fall '03 | 35,066 | Spring '06 | 32,604 |
| Spring '04 | 33,499 | Fall '06 | 34,334 |
| Fall '04 | 35,180 | Spring '07 | 32,342 |

Table 17
Southwestern University Enrollment

| Fall '02 | 1,320 | Spring '05 | 1,222 |
| :---: | :---: | :---: | :---: |
| Spring '03 | 1,211 | Fall '05 | 1,310 |
| Fall '03 | 1,265 | Spring '06 | 1,245 |
| Spring '04 | 1,206 | Fall '06 | 1,277 |
| Fall '04 | 1,277 | Spring '07 | 1,222 |

Table 18
Texas Tech University Enrollment

| Fall '02 | 27,569 | Spring '05 | 26,221 |
| :---: | :---: | :---: | :---: |
| Spring '03 | 25,752 | Fall '05 | 28,001 |
| Fall '03 | 28,549 | Spring '06 | 26,115 |
| Spring '04 | 26,384 | Fall '06 | 27,996 |
| Fall '04 | 28,325 | Spring '07 | 25,829 |

Table 19
Texas Christian University Enrollment

| Fall '02 | 7,934 | Spring '05 | 8,334 |
| :---: | :---: | :---: | :---: |
| Spring '03 | 8,034 | Fall '05 | 8,342 |
| Fall '03 | 8,202 | Spring '06 | 8,334 |
| Spring '04 | 8,298 | Fall '06 | 8,354 |
| Fall '04 | 8,330 | Spring '07 | 8,537 |

Table 20
Angelo State University Enrollment

| Fall '02 | 6,268 | Spring '05 | 5,491 |
| :---: | :---: | :---: | :---: |
| Spring '03 | 5,674 | Fall '05 | 6,156 |
| Fall '03 | 6,043 | Spring '06 | 5,528 |
| Spring '04 | 5,506 | Fall '06 | 6,268 |
| Fall '04 | 6,137 | Spring '07 | 5,549 |

Table 21
Stephen F. Austin State University Enrollment

| Fall '02 | 11356 | Spring '05 | 10564 |
| :---: | :---: | :---: | :---: |
| Spring '03 | 10789 | Fall '05 | 11435 |
| Fall '03 | 11408 | Spring '06 | 10628 |
| Spring '04 | 10623 | Fall '06 | 11756 |
| Fall '04 | 11287 | Spring '07 | 10822 |

Table 22
Oklahoma State University Enrollment

| Fall '02 | 22700 | Spring '05 | 21775 |
| :---: | :---: | :---: | :---: |
| Spring '03 | 21626 | Fall '05 | 23165 |
| Fall '03 | 23274 | Spring '06 | 21863 |
| Spring '04 | 22065 | Fall '06 | 23307 |
| Fall '04 | 23330 | Spring '07 | 21606 |

Table 23
Texas A\&M University Enrollment

| Fall '02 | 45083 | Spring '05 | 41429 |
| :---: | :---: | :---: | :---: |
| Spring '03 | 42119 | Fall '05 | 44647 |
| Fall '03 | 44813 | Spring '06 | 41591 |
| Spring '04 | 41600 | Fall '06 | 45143 |
| Fall '04 | 44435 | Spring '07 | 42374 |

Table 24
University of Texas at Arlington Enrollment

| Fall '02 | 23821 | Spring '05 | 24153 |
| :---: | :---: | :---: | :---: |
| Spring '03 | 22592 | Fall '05 | 25432 |
| Fall '03 | 24979 | Spring '06 | 24757 |
| Spring '04 | 24187 | Fall '06 | 24888 |
| Fall '04 | 25297 | Spring '07 | 23526 |

Table 25
Tarleton State University Enrollment

| Fall '02 | 6822 | Spring '05 | 6909 |
| :---: | :---: | :---: | :---: |
| Spring '03 | 6397 | Fall '05 | 7585 |
| Fall '03 | 7195 | Spring '06 | 7073 |
| Spring '04 | 6769 | Fall '06 | 7776 |
| Fall '04 | 7344 | Spring '07 | 7146 |

Table 26
Sam Houston State University Enrollment

| Fall '02 | 13,091 | Spring '05 | 13645 |
| :---: | :---: | :---: | :---: |
| Spring '03 | 12046 | Fall '05 | 15,357 |
| Fall '03 | 13,460 | Spring '06 | 14411 |
| Spring '04 | 12844 | Fall '06 | 15,935 |
| Fall '04 | 14,371 | Spring '07 | 15006 |

All numbers were finally used to develop graphs that are presented in Appendix E to represent the changes experienced at each institution each year compared to other sports and also compared to enrollment. These line graphs show well defined, easy to read values for the changes experienced by each program and by the region as a whole. These graphs are based on the calculations of percentage change over the time period study and which were taken form the number of teams participating in each program.

## Analysis

Through analysis of all collected data the researcher was able to determine that the regional totals show all sports are experiencing increases at a rate greater than enrollment is increasing. The percentage change for each sport, all sports total, and Fall and Spring enrollment for each program is illustrated by the use of charts in Appendix C, while totals for all schools combined are illustrated in Appendix D. These charts are also illustrated using graphs in Appendix E. While these increases hold true when analyzing regional totals, one school experienced decreases in participation while experiencing an
increase in enrollment. Over the five year period Southwestern University experienced a decrease in total participation in Intramural programs of 30.30\%. From the beginning of the study until completion, every sport program offered by the Intramural program experienced a decrease. The greatest decrease was experienced in soccer with a decrease of $56.52 \%$ over the five year period, while the sport that showed the least drop off was flag football with a decrease of $3.57 \%$.

While all remaining schools showed increases in total sports participation in the Intramural program, there were some sports that showed decreases even though the overall program was experiencing growth. The sports that experienced decreases over the five year period were soccer at University of Houston (-28.21\%) and Texas Tech University (-14.58\%) and flag football (-6.13\%) and volleyball (-12.08\%) at Texas A\&M University. Tarleton State University also experienced $0 \%$ change over the five year period in flag football participation. Excluding these sports all other changes in participation, both by sport and total, at all schools showed increases over the five year period. The sport with the smallest increase was basketball at the University of Texas at Austin, which only experienced an increase of $.2 \%$, while flag football at Angelo State University experienced an increase of $340 \%$.

When looking at program totals, the greatest percentage increase was experienced at Angelo State University where an increase of $160.28 \%$ took place. Only 214 total teams participated in 2002-2003 while 557 teams participated in 2006-2007. During this same time period the student enrollment for the fall showed no change while spring enrollment decreased $2.20 \%$. At the same time, Texas A\&M University experienced the smallest percentage increase showing an increase of only $.76 \%$ over the five year period.

This increase in participation was still greater than the change in enrollment which was only $.13 \%$ for Fall enrollment and $.61 \%$ for Spring enrollment.

Not only did all schools, other than Southwestern University, show an increase in total participation, but all schools also showed greater percent change in participation than in enrollment. While a majority of the schools showed an increase in their enrollment numbers, the University of Texas at Austin showed a decrease in enrollment of $4.83 \%$ in the Fall and $4.86 \%$ in the Spring. This was the smallest positive change in enrollment figures while the greatest increase belongs to Sam Houston State University. Sam Houston experienced an increase of $21.72 \%$ for the Fall and $24.57 \%$ for the Spring.

When looking at regional totals, Appendix D, all sports showed increases in participation over the five year period. Three sports did experience decreases in participation on at least one occasion over the five year period. These sports were Soccer (2002-2003 - 2003-2004-.05\%), Flag Football (2003-2004 - 2004-2005 -.33\%), and Volleyball (2004-2005-2005-2006-.04\%) but all of these sports rebounded to experience increases for the five year period. Softball was the sport with the largest increase (16.63\%) while soccer was the sport with the lowest percent change for the five year period (7.84\%). Total team sport participation experienced an increase of $23.85 \%$ which translates into an increase of 1,631 teams. During this same time the enrollment at all schools involved in the study increased only $2.23 \%$ in the Fall and $1.68 \%$ in the Spring.

## CHAPTER V

## CONCLUSION

## Findings

Based on the analysis of the data, the researcher has found that while enrollments in universities have increased over recent years that participation in intramural sports have also increased but at a greater rate than enrollment. While many universities have experienced an increase in numbers of enrolled students, many recreation programs have benefited not only from the increase in students on campus but also from a greater emphasis on participation and campus involvement that was reflected in the review of literature. While there were occasional regressions in participation, the majority of the data showed that all sports were increasing in involvement at a rate greater than enrollment. The increase in enrollment was far less rapid than the increase in participation in Intramural sports.

## Conclusions

The researcher believes that, while participation in Intramural sports is on the rise as a whole, there are many contributing factors helping to increase the participation on campus. A trend of developing more recreational facilities combined with increased emphasis on campus recreation have aided in the development of increased numbers. Increased marketing and more readily available tools for marketing such as email and
internet networking sites may also be assisting in the rapid growth in popularity of Intramural sports. A final contributing factor to the rapid increase in participation could be the willingness of campus recreation professionals to offer sports outside of the traditional sports offered by Intramural programs. An increase in opportunities for participation in non-traditional sports may be also helping to increase number of students willing to participate in the stand by traditional sports that were analyzed for this research. While it is very obvious that the trend for participation in Intramural sports is very positive, the causes for this positive movement are much more difficult to track.

## Recommendations

In the future, the researcher believes a follow up study including all universities in the area could be conducted to include programs under the administration of one professional staff member. Further research, could also be conducted to compare the amount of participation in Intramural activities prior, during, and after construction of recreational facilities to attempt to discover what correlation, if any exists during these times. Also included in future research could be all sports offered by the programs in the region. This study used the traditional major team sports in hopes that the data would be most readily available. In order to decrease confusion and prevent the inclusion of support staff in the reported number of professionals, the definition of professional should be more clearly defined to explain that only professionals who directly contribute to the planning and implementation of programs should be included.

An area where data were lacking and difficult to collect was the participation levels of students based on sex of the participant. Since the numbers of teams were given in lump sums, the researcher was unable to derive what trends exist based on sex. With
advances in technology that are assisting campus recreation professionals in tracking and detailing numbers of participants based on sex, age, classification, and many other factors, the opportunities for further inquiry are great. These advances in technology often accompany advances in scheduling software that are becoming more frequently used in campus recreation programs.

Finally, in an effort to create a more accurate pool of data, a researcher could develop a similar study and proactively collect the data over the time period that is desired to be explored. By actively working with campus recreation professionals over the duration of the study, the researcher will be able to more accurately collect data and reduce the amount of lost data that occurs during a change in professional staff. This proactive approach could broaden the scope of the study while also allowing the researcher to focus on the details that were not available for analysis during this study. While a proactive study would be more time consuming for the researcher, the data that would be discovered and developed would be more useful and accurate than a retroactive study such as the current analysis.

## REFERENCES

Ahlum, D. (2005). Intramural Coordinator Oklahoma State University. J. Harper.
Barcelona, R. J. and C. M. Ross (2002). "Participation Patterns in Campus Recreational Sports: An Examination of Quality of Student Effort from 1983 to 1998." Recreational Sports Journal 26(1): 41-53.

Beggs, B. A., D. J. Elkins, et al. (2005). "Overcoming Barriers to Participation in Campus Recreational Sports." Recreational Sports Journal 29(2): 143-155.

Belch, H. A., M. Gebel, et al. (2001). "Relationship between student recreation complex use, academic performance, and persistence of first-time freshmen." NASPA Journal [National Association of Student Personnel Administrators] 38(2): 254-268.

Berry, W. D. and J. Doughtery (1996). Student Retention: Using Recreation to Assist in the Transition from High School to College. NIRSA Conference Proceedings. Corvallis, OR, National Intramural-Recreational Sports Association: 35-42.

Collins, J. R., L. Valerius, et al. (2001). "The Relationship between College Student's Self-Esteem and the Frequency and Importance of Their Participation in Recreational Activities." NIRSA Journal 25(2): 38-47.

Dillman, D. A. (1991). "Mail and Telephone Surveys: The Total Design Method." Annual Review of Sociology 17(1): 25.

Doll, D. (2007). Assistant Intramural/Sport Club Coordinator University Texas at Austin. J. Harper.

Douglas, K. A., J. L. Collins, et al. (1995). "Results from the 1995 National College Health Risk Behavior survey." Journal of American College Health 46: 55-66.

Dr. William F. Stier, J., D. R. C. Schneider, et al. (2006). "A Survey of Campus Recreation Directors at NIRSA Institutions: Activities Emphasized, Student Participation Patterns, Trends and Future Offerings Contemplated." Recreational Sports Journal 29(1): 42-57.

Farrell, A. S. T. (1999). "The Intramural Program: A Comprehensive Analysis." NIRSA Journal 23: 32-38.

Gose, B. (1995). "Enrollment: Ups and downs." The Chronicle of Higher Education 42(13): A28.

Hackett, M. W. (2007). "Exploring the Relationship Between Recreational Sports Employment and Academic Success." Recreational Sports Journal 31(1): 69-74.
http://www.nirsa.org/about/cd history. (2006). "History of NIRSA." Retrieved January 24, 2006.

Hupp, S. L. and N. E. Rinaldi (1991). "Evaluate intramural programs by student satisfaction." NIRSA Journal 15(2): 50-56.

Jackson, J. (2007). Intramural Coordinator Texas A\&M University. J. Harper.
James B. Lewis, P. D., CRSS, M. S. Robert Barcelona, et al. (2001). "Leisure Satisfaction and Quality of Life: Issues for the Justification of Campus Recreation." NIRSA Journal 25(2): 57-63.

Kanters, M. A. (2000). "Recreational Sport Participation as a Moderator of College Stress." NIRSA Journal 24(2): 10-23.

Kelly, J. (1996). 21st Century Leisure Current Issues.
Kennedy, M. (2005). "Winning Ways." American School \& University 78(4).
Kovac, D. C. and J. E. Beck (1997). "A Comparison of Student Perceptions, Satisfaction and Patterns of Participation in Recreational Sports." NIRSA Journal 21: 10-12.

McCauley, J. (2007). Assistant Director Intramurals Texas Tech University. J. Harper.
Merriam-Webster. (2007). "Merriam-Webster Online Dictionary." Retrieved 10/26/07, 2007, from http://www.merriam-webster.com/dictionary/.

Mills, B. (2007). Coordinator Intramural Sports and Sports Clubs Stephen F. Austin University. J. Harper.

Pauley, R. E. (1995). "The game of a lifetime." NIRSA Journal 19(2): 28-32.
Politino, V. (1987). "Physical Fitness and Intramurals: Creating exciting opportunities." Journal of Physical Education, Recreation \& Dance 58(2): 54-56.

Roberts, K. (2002). "Lifelong Participation, Physical Education and the Work of Ken Roberts." Sport, Education and Society 7(2): 167-182.

Rosen, C. S. (2000). "Integrating stage and continuum models to explain processing of exercise messages and exercise initiation among sedentary college students." Health Psychology 19: 172-180.

Rothwell, E. and P. Theodore (2006). "Intramurals and College Student Development: The Role of Intramurals on Values Clarification." Recreational Sports Journal 30(1): 4652.

Snodgrass, M. L. and C. E. Tinsley (1990). "Recreation and wellness: Identifying motivations for participation in recreational sports." NIRSA Journal 15(1): 34-38.

Stobart, B. and H. Lin (2000). "Recreation Students' Attitude Toward Intramural Sports." NIRSA Journal 24(1): 53-59.
U.S. Department of Education, N. C. f. E. S. (2002). Higher Education Enrollment.

Young, S. J. and C. M. Ross (2000). "Recreational Sports Trends for the 21st Century: Results of a Delphi Study." NIRSA Journal 24(2): 24-37.

## Appendix A

Participation Trends in Intramural Sports in Texas and Oklahoma
Name:
Phone:

School:

How many professionals* are employed in your Intramural Department? $\quad \square$
Please fill in the number of teams for each year with the corresponding sport.

|  | 2006-2007 | 2005-2006 | 2004-2005 | 2003-2004 | 2002-2003 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Flag Football |  |  |  |  |  |
| \# of teams |  |  |  |  |  |
| Soccer |  |  |  |  |  |
| \# of teams |  |  |  |  |  |
| Volleyball |  |  |  |  |  |
| \# of teams |  |  |  |  |  |
| Basketball |  |  |  |  |  |
| \# of teams |  |  |  |  |  |
| Softball |  |  |  |  |  |
| \# of teams |  |  |  |  |  |

Please provide the total enrollment for your school in each of the following semesters.

| Semester | Enrollment | Semester | Enrollment |
| :--- | :--- | :--- | :--- |
| Fall '02 |  | Spring '05 |  |
| Spring '03 |  | Fall '05 |  |
| Fall '03 |  | Spring '06 |  |
| Spring '04 |  | Fall '06 |  |
| Fall '04 |  | Spring '07 |  |

Please describe any non-traditional programs that are offered that you experience great success with.
$\square$
Are there any programs that you are struggling to keep participant interested?

Appendix B
Participation Trends in Intramural Sports in Texas and Oklahoma

| Name: | Darci Doll |
| :--- | :--- |
|  |  |
|  | The University of Texas at |
| School: | Austin |

How many professionals* are employed in your Intramural Department?
Please fill in the number of teams for each year with the corresponding sport.

|  | 2006-2007 | 2005-2006 | 2004-2005 | 2003-2004 | 2002-2003 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Flag Football | 416 | 403 | 390 | 418 | 413 |
| \# of teams |  |  |  |  |  |
| Soccer | 199 | 176 | 173 | 159 | 155 |
| \# of teams |  |  |  |  |  |
| Volleyball | 194 | 177 | 207 | 193 | 176 |
| \# of teams |  |  |  |  |  |
| Basketball | 502 | 485 | 502 | 507 | 501 |
| \# of teams |  |  |  |  |  |
| Softball | 297 | 283 | 301 | 307 | 286 |
| \# of teams |  |  |  |  |  |
|  |  |  | 1573 |  | 1531 |

Please provide the total enrollment for your school in each of the following semesters.

| Semester | Enrollment | Semester | Enrollment |
| :--- | ---: | :--- | ---: |
| Fall '02 | 52,261 | Spring '05 | 47,444 |
| Spring '03 | 49,392 | Fall '05 | 49,791 |
| Fall '03 | 51,438 | Spring '06 | 46,545 |
| Spring '04 | 48,539 | Fall '06 | 49,738 |
| Fall '04 | 50,377 | Spring '07 | 46,993 |

Please describe any non-traditional programs that are offered that you experience great success with.
Are there any programs that you are struggling to keep participant interested?

*For the purposes of this study a professional is defined as any graduate assistant, intern or full time employee whose primary responsibility is the administration of intramural sports.

Participation Trends in Intramural Sports in Texas and Oklahoma
Name: Britton Sherry $\quad$ Phone: 940.565 .2730

School: University of North Texas
How many professionals* are employed in your Intramural Department? $\quad 3$

Please fill in the number of teams for each year with the corresponding sport.

|  | 2006-2007 | 2005-2006 | 2004-2005 | 2003-2004 | $\begin{aligned} & 2002- \\ & 2003 \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Flag Football |  |  |  |  |  |
| \# of teams | 110 | 102 | 100 | 91 | 95 |
| Soccer |  |  |  |  |  |
| \# of teams | 83 | 61 | 62 | 54 | 58 |
| Volleyball |  |  |  |  |  |
| \# of teams | 73 | 61 | 57 | 53 | 61 |
| Basketball |  |  |  |  |  |
| \# of teams | 108 | 103 | 88 | 97 | 99 |
| Softball |  |  |  |  |  |
| \# of teams | 74 | 71 | 70 | 67 | 50 |
|  |  | 398 | 377 |  |  |

Please provide the total enrollment for your school in each of the following semesters.

| Semester | Enrollment | Semester | Enrollment |
| :--- | :---: | :--- | :---: |
| Fall '02 | 30,183 | Spring '05 | 29,509 |
| Spring '03 | 29,035 | Fall '05 | 32,047 |
| Fall '03 | 31,065 | Spring '06 | 29817 |
| Spring '04 | 29,313 | Fall '06 | 32,443 |
| Fall '04 | 31,155 | Spring '07 | 31,622 |

Please describe any non-traditional programs that are offered that you experience great success with.

Texas Hold 'em, Table Tennis, 3 point contest
Are there any programs that you are struggling to keep participant interested?

Some have low numbers but still enough to carry out the activity
*For the purposes of this study a professional is defined as any graduate assistant, intern or full time employee whose primary responsibility is the administration of intramural sports.

## Participation Trends in Intramural Sports in Texas and Oklahoma

Name: Adam Finney Phone: 713-743-9506

School: University of Houston

| How many professionals* are employed in your Intramural Department? | 2 |
| :--- | :--- |

Please fill in the number of teams for each year with the corresponding sport.

|  | 2006-2007 | 2005-2006 | 2004-2005 | 2003-2004 | $\begin{aligned} & 2002- \\ & 2003 \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Flag Football |  |  |  |  |  |
| \# of teams | 54 | 58 | 48 | 42 | 47 |
| Soccer |  |  |  |  |  |
| \# of teams | 28 | 23 | 24 | 28 | 39 |
| Volleyball |  |  |  |  |  |
| \# of teams | 45 | 36 | 40 | 34 | 37 |
| Basketball |  |  |  |  |  |
| \# of teams | 78 | 66 | 69 | 58 | 50 |
| Softball |  |  |  |  |  |
| \# of teams | 34 | 38 | 34 | 45 | 30 |
|  |  | 221 | 215 |  |  |

Please provide the total enrollment for your school in each of the following semesters.

| Semester | Enrollment | Semester | Enrollment |
| :--- | ---: | :--- | ---: |
| Fall '02 | 34,443 | Spring '05 | 33,066 |
| Spring '03 | 33,116 | Fall '05 | 34,582 |
| Fall '03 | 35,066 | Spring '06 | 32,604 |
| Spring '04 | 33,499 | Fall '06 | 34,334 |
| Fall '04 | 35,180 | Spring '07 | 32,342 |

Please describe any non-traditional programs that are offered that you experience great success with.
$\square$
Are there any programs that you are struggling to keep participant interested?

Track and Swim Meets, Ultimate Frisbee and Golf

Participation Trends in Intramural Sports in Texas and Oklahoma
Name: Anna Castillo Phone: (512)863-1783

School: Southwestern University

How many professionals* are employed in your Intramural Department?
Please fill in the number of teams for each year with the corresponding sport.

|  | 2006-2007 | 2005-2006 | 2004-2005 | 2003-2004 | 2002-2003 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Flag Football |  |  |  |  |  |
| \# of teams | 27 | 22 | 26 | 31 | 28 |
| Soccer |  |  |  |  |  |
| \# of teams | 10 | 12 | 16 | 17 | 23 |
| Volleyball |  |  |  |  |  |
| \# of teams | 16 | 17 | 19 | 33 | 27 |
| Basketball |  |  |  |  |  |
| \# of teams | 22 | 20 | 30 | 34 | 29 |
| Softball |  |  |  |  |  |
| \# of teams | 17 | 19 | 29 | 19 | 25 |
|  |  | 90 | 120 |  | 132 |

Please provide the total enrollment for your school in each of the following semesters.

| Semester | Enrollment | Semester | Enrollment |
| :--- | ---: | :--- | ---: |
| Fall '02 | 1,320 | Spring '05 | 1222 |
| Spring '03 | 1211 | Fall '05 | 1,310 |
| Fall '03 | 1,265 | Spring '06 | 1245 |
| Spring '04 | 1206 | Fall '06 | 1,277 |
| Fall '04 | 1,277 | Spring '07 | 1222 |

Please describe any non-traditional programs that are offered that you experience great success with.
Dodgeball is by far our best sport. We had 32 teams our first year and only dropped to 26 our next year
Are there any programs that you are struggling to keep participant interested?
All major team sports seem to be dropping. I am starting to turn them into two semesters of tournaments.

Participation Trends in Intramural Sports in Texas and Oklahoma
Name: $\quad$ Jared McCauley $\quad$ Phone: $806-742-3351$

School: Texas Tech University

| How many professionals* are employed in your Intramural Department? | 4 |
| :--- | :--- |

Please fill in the number of teams for each year with the corresponding sport.

|  | 2006-2007 | 2005-2006 | 2004-2005 | 2003-2004 | 2002-2003 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Flag Football |  |  |  |  |  |
| \# of teams | 416 | 395 | 356 | 393 | 360 |
| Soccer |  |  |  |  |  |
| \# of teams | 123 | 103 | 111 | 132 | 144 |
| Volleyball |  |  |  |  |  |
| \# of teams | 197 | 158 | 166 | 175 | 136 |
| Basketball |  |  |  |  |  |
| \# of teams | 349 | 351 | 339 | 347 | 304 |
| Softball |  |  |  |  |  |
| \# of teams | 282 | 274 | 272 | 267 | 258 |
|  | 1367 | 1281 | 1244 |  | 1202 |

Please provide the total enrollment for your school in each of the following semesters.

| Semester | Enrollment | Semester | Enrollment |
| :--- | ---: | :--- | ---: |
| Fall '02 | 27,569 | Spring '05 | 26,221 |
| Spring '03 | 25,752 | Fall '05 | 28,001 |
| Fall '03 | 28,549 | Spring '06 | 26,115 |
| Spring '04 | 26,384 | Fall '06 | 27,996 |
| Fall '04 | 28,325 | Spring '07 | 25,829 |

Please describe any non-traditional programs that are offered that you experience great success with.

Team Bowling has been a big success as well as the annual Fall semester Swim Meet
Are there any programs that you are struggling to keep participant interested?

Inner-Tube Water Polo

## Participation Trends in Intramural Sports in Texas and Oklahoma

Name: $\quad$ Mike Hackemack $\quad$ Phone: 8179153500

School: TCU

How many professionals* are employed in your Intramural Department? $\quad 2$
Please fill in the number of teams for each year with the corresponding sport.

|  | 2006-2007 | 2005-2006 | 2004-2005 | 2003-2004 | 2002-2003 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Flag Football |  |  |  |  |  |
| \# of teams | 103 | 90 | 86 | 73 | 70 |
| Soccer |  |  |  |  |  |
| \# of teams | 60 | 63 | 55 | 55 | 50 |
| Volleyball |  |  |  |  |  |
| \# of teams | 30 | 33 | 30 | 27 | 25 |
| Basketball |  |  |  |  |  |
| \# of teams | 83 | 70 | 72 | 66 | 65 |
| Softball |  |  |  |  |  |
| \# of teams | 40 | 34 | 33 | 42 | 32 |
|  | 316 | 290 | 276 | 263 | 242 |

Please provide the total enrollment for your school in each of the following semesters.

| Semester | Enrollment | Semester | Enrollment |
| :--- | ---: | :--- | ---: |
| Fall '02 | 7934 | Spring '05 | 8334 |
| Spring '03 | 8034 | Fall '05 | 8342 |
| Fall '03 | 8202 | Spring '06 | 8334 |
| Spring '04 | 8298 | Fall '06 | 8354 |
| Fall '04 | 8330 | Spring '07 | 8537 |

Please describe any non-traditional programs that are offered that you experience great success with.

Poker, Rock paper scissors
Are there any programs that you are struggling to keep participant interested?

> Women's sports, softball = forfeit city

# Participation Trends in Intramural Sports in Texas and Oklahoma 

| Name: | Dan Robertson | Phone: | 325-942-2034 |
| :--- | :--- | :---: | :---: |
|  |  |  |  |
| School: | Angelo State University |  |  |
| How many professionals* are employed in your Intramural |  |  |  |
| Department? | 2 |  |  |

Please fill in the number of teams for each year with the corresponding sport.

|  | 2006-2007 | 2005-2006 | 2004-2005 | 2003-2004 | 2002-2003 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Flag Football |  |  |  |  |  |
| \# of teams | 115 | 71 | 73 | 56 | 60 |
| Soccer |  |  |  |  |  |
| \# of teams | 44 | 18 | 6 | 8 | 10 |
| Volleyball |  |  |  |  |  |
| \# of teams | 92 | 50 | 43 | 43 | 43 |
| Basketball |  |  |  |  |  |
| \# of teams | 141 | 106 | 84 | 60 | 50 |
| Softball |  |  |  |  |  |
| \# of teams | 165 | 142 | 76 | 72 | 51 |
|  | 55 | 387 | 282 |  | 21 |

Please provide the total enrollment for your school in each of the following semesters.

| Semester | Enrollment | Semester | Enrollment |
| :--- | :---: | :--- | :---: |
| Fall '02 | 6268 | Spring '05 | 5491 |
| Spring '03 | 5674 | Fall '05 | 6156 |
| Fall '03 | 6043 | Spring '06 | 5528 |
| Spring '04 | 5506 | Fall '06 | 6268 |
| Fall '04 | 6137 | Spring '07 | 5549 |

Please describe any non-traditional programs that are offered that you experience great success with.
Sand Volleyball is our best non-traditional sport that we offer. Our last time offered was in the Spring of 2007, and we had 42 teams.
Are there any programs that you are struggling to keep participant interested?
Track and Disc Golf are our two activities that have not produced the necessary numbers.

[^0]Name: $\quad$ Brian Mills $\quad$ Phone: $936-468-1775$

|  | Stephen F. Austin State |
| :--- | :--- |
| School: | University |

Please fill in the number of teams for each year with the corresponding sport.

|  | 2006-2007** | 2005-2006 | 2004-2005 | 2003-2004 | $\begin{aligned} & 2002- \\ & 2003 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Flag Football |  |  |  |  |  |
| \# of teams | 96 | 72 |  |  |  |
| Soccer |  |  |  |  |  |
| \# of teams | 22 | 17 |  |  |  |
| Volleyball |  |  |  |  |  |
| \# of teams | 65 | 32 |  |  |  |
| Basketball |  |  |  |  |  |
| \# of teams | 53 | 37 |  |  |  |
| Softball |  |  |  |  |  |
| \# of teams | 79 | 61 |  |  |  |
|  |  | 219 | 0 |  |  |

Please provide the total enrollment for your school in each of the following semesters.

| Semester | Enrollment | Semester | Enrollment |
| :--- | :---: | :--- | :---: |
| Fall '02 | 11356 | Spring '05 | 10564 |
| Spring '03 | 10789 | Fall '05 | 11435 |
| Fall '03 | 11408 | Spring '06 | 10628 |
| Spring '04 | 10623 | Fall '06 | 11756 |
| Fall '04 | 11287 | Spring '07 | 10822 |

Please describe any non-traditional programs that are offered that you experience great success with.
SFA had never offered co-rec sports for their major team sports or soccer. Our numbers major boost was because of a reorganization of the program and a simplification for participation. SFA enrollment has been up and down over the past few years, but IMS Department was very consistent.
Are there any programs that you are struggling to keep participant interested?

Participation Trends in Intramural Sports in Texas and Oklahoma
Name: Jason Linsenmeyer $\quad$ Phone: $\quad$ 405-744-5577

Oklahoma State
School: University


Please fill in the number of teams for each year with the corresponding sport.

|  | 2006-2007 | 2005-2006 | 2004-2005 | 2003-2004 | 2002-2003 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Flag Football | 346 | 318 | 308 | 288 | 292 |
| \# of teams |  |  |  |  |  |
| Soccer | 109 | 87 | 82 | 88 | 86 |
| \# of teams |  |  |  |  |  |
| Volleyball | 180 | 156 | 151 | 140 | 136 |
| \# of teams |  |  |  |  |  |
| Basketball | 321 | 313 | 298 | 293 | 315 |
| \# of teams |  |  |  |  |  |
| Softball | 214 | 226 | 222 | 195 | 184 |
| \# of teams |  |  |  |  |  |
|  | 1170 | 1100 | 1061 |  | 1013 |

Please provide the total enrollment for your school in each of the following semesters.

| Semester | Enrollment | Semester | Enrollment |
| :--- | ---: | :--- | ---: |
| Fall '02 | 22700 | Spring '05 | 21775 |
| Spring '03 | 21626 | Fall '05 | 23165 |
| Fall '03 | 23274 | Spring '06 | 21863 |
| Spring '04 | 22065 | Fall '06 | 23307 |
| Fall '04 | 23330 | Spring '07 | 21606 |

Please describe any non-traditional programs that are offered that you experience great success with.
Quickball we see $60+$ teams, swim meet over $100+$ participants, bowling over $200+$ participants, horseshoes we have 150 participants
This year in Archery our women participants out numbered the men. This is the first sport that I know of this happening here at OSU.
Are there any programs that you are struggling to keep participant interested?
Our track meet has steadly declined and we have eliminated that sport from this years calendar

[^1]> Participation Trends in Intramural Sports in Texas and Oklahoma
Name: Jerrod Jackson Phone:

School: Texas A\&M University

How many professionals* are employed in your Intramural Department? $\quad 3$
Please fill in the number of teams for each year with the corresponding sport.

|  | 2006-2007 | 2005-2006 | 2004-2005 | 2003-2004 | 2002-2003 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Flag Football |  |  |  |  |  |
| \# of teams | 398 | 370 | 382 | 396 | 424 |
| Soccer |  |  |  |  |  |
| \# of teams | 227 | 184 | 179 | 174 | 195 |
| Volleyball |  |  |  |  |  |
| \# of teams | 182 | 177 | 208 | 204 | 207 |
| Basketball |  |  |  |  |  |
| \# of teams | 385 | 366 | 366 | 354 | 356 |
| Softball |  |  |  |  |  |
| \# of teams | 274 | 263 | 262 | 254 | 273 |
|  | 1466 | 1360 | 1397 | 1382 | 1455 |

Please provide the total enrollment for your school in each of the following semesters.

| Semester | Enrollment | Semester | Enrollment |
| :--- | ---: | :--- | ---: |
| Fall '02 | 45083 | Spring '05 | 41429 |
| Spring '03 | 42119 | Fall '05 | 44647 |
| Fall '03 | 44813 | Spring '06 | 41591 |
| Spring '04 | 41600 | Fall '06 | 45143 |
| Fall '04 | 44435 | Spring '07 | 42374 |

Please describe any non-traditional programs that are offered that you experience great success with.
$\square$
Are there any programs that you are struggling to keep participant interested?
$\square$

## Participation Trends in Intramural Sports in Texas and Oklahoma

Name: Drew Barfield Phone:

School: UT Arlington

How many professionals* are employed in your Intramural Department? $\quad 3$
Please fill in the number of teams for each year with the corresponding sport.

|  | 2006-2007 | 2005-2006 | 2004-2005 | 2003-2004 | 2002-2003 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Flag Football |  |  |  |  |  |
| \# of teams | 65 | 51 | 51 | 56 | 51 |
| Soccer |  |  |  |  |  |
| \# of teams | 43 | 50 | 30 | 26 | 35 |
| Volleyball |  |  |  |  |  |
| \# of teams | 45 | 40 | 47 | 31 | 44 |
| Basketball |  |  |  |  |  |
| \# of teams | 85 | 65 | 65 | 77 | 79 |
| Softball |  |  |  |  |  |
| \# of teams | 44 | 44 | 39 | 37 | 32 |
|  |  | 250 | 232 | 227 | 241 |

Please provide the total enrollment for your school in each of the following semesters.

| Semester | Enrollment | Semester | Enrollment |
| :--- | ---: | :--- | ---: |
| Fall '02 | 23821 | Spring '05 | 24153 |
| Spring '03 | 22592 | Fall '05 | 25432 |
| Fall '03 | 24979 | Spring '06 | 24757 |
| Spring '04 | 24187 | Fall '06 | 24888 |
| Fall '04 | 25297 | Spring '07 | 23526 |

Please describe any non-traditional programs that are offered that you experience great success with.
$\square$
Are there any programs that you are struggling to keep participant interested?
$\square$

## Participation Trends in Intramural Sports in Texas and Oklahoma

Name: Daron Trussell Phone:

School: Tarleton State University

How many professionals* are employed in your Intramural Department? $\quad 2$
Please fill in the number of teams for each year with the corresponding sport.

|  | 2006-2007 | 2005-2006 | 2004-2005 | 2003-2004 | 2002-2003 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Flag Football |  |  |  |  |  |
| \# of teams | 80 | 75 | 74 | 74 | 80 |
| Soccer |  |  |  |  |  |
| \# of teams | 20 | 21 | 21 | 23 | 13 |
| Volleyball |  |  |  |  |  |
| \# of teams | 33 | 25 | 25 | 23 | 21 |
| Basketball |  |  |  |  |  |
| \# of teams | 54 | 42 | 44 | 50 | 36 |
| Softball |  |  |  |  |  |
| \# of teams | 100 | 97 | 91 | 94 | 82 |
|  |  | 260 | 255 | 264 | 232 |

Please provide the total enrollment for your school in each of the following semesters.

| Semester | Enrollment | Semester | Enrollment |
| :--- | ---: | :--- | ---: |
| Fall '02 | 6822 | Spring '05 | 6909 |
| Spring '03 | 6397 | Fall '05 | 7585 |
| Fall '03 | 7195 | Spring '06 | 7073 |
| Spring '04 | 6769 | Fall '06 | 7776 |
| Fall '04 | 7344 | Spring '07 | 7146 |

Please describe any non-traditional programs that are offered that you experience great success with.
$\square$
Are there any programs that you are struggling to keep participant interested?
$\square$

## Participation Trends in Intramural Sports in Texas and Oklahoma

Name: Steven Wright $\quad$ Phone:

## Sam Houston State

School: University

How many professionals* are employed in your Intramural Department?
Please fill in the number of teams for each year with the corresponding sport.

|  | 2006-2007 | 2005-2006 | 2004-2005 | 2003-2004 | 2002-2003 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Flag Football |  |  |  |  |  |
| \# of teams | 75 | 92 | 70 | 70 |  |
| Soccer |  |  |  |  |  |
| \# of teams | 35 | 33 | 34 | 22 |  |
| Volleyball |  |  |  |  |  |
| \# of teams | 41 | 38 | 39 | 27 |  |
| Basketball |  |  |  |  |  |
| \# of teams | 73 | 62 | 57 | 56 |  |
| Softball |  |  |  |  |  |
| \# of teams | 99 | 99 | 93 | 69 |  |
|  |  | 324 | 293 | 244 | 0 |

Please provide the total enrollment for your school in each of the following semesters.

| Semester | Enrollment | Semester | Enrollment |
| :--- | ---: | :--- | ---: |
| Fall '02 | 13,091 | Spring '05 | 13645 |
| Spring '03 | 12046 | Fall '05 | 15,357 |
| Fall '03 | 13,460 | Spring '06 | 14411 |
| Spring '04 | 12844 | Fall '06 | 15,935 |
| Fall '04 | 14,371 | Spring '07 | 15006 |

Please describe any non-traditional programs that are offered that you experience great success with.

Are there any programs that you are struggling to keep participant interested?

## Appendix C.

Percentage Change of Team numbers and Enrollment: The University of Texas at Austin

|  | $02-03-03-04$ | $03-04-04-05$ | $04-05-05-06$ | $05-06-06-07$ | $02-03-06-07$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Football | $1.21 \%$ | $-6.70 \%$ | $3.33 \%$ | $3.23 \%$ | $0.73 \%$ |
|  |  |  |  |  |  |
| Soccer | $2.58 \%$ | $8.81 \%$ | $1.73 \%$ | $13.07 \%$ | $28.39 \%$ |
|  |  |  |  |  |  |
| Volleyball | $9.66 \%$ | $7.25 \%$ | $-14.49 \%$ | $9.60 \%$ | $10.23 \%$ |
|  |  |  |  |  |  |
| Basketball | $1.20 \%$ | $-0.99 \%$ | $-3.39 \%$ | $3.51 \%$ | $0.20 \%$ |
|  |  |  |  |  |  |
| Softball | $7.34 \%$ | $-1.95 \%$ | $-5.98 \%$ | $4.95 \%$ | $3.85 \%$ |
|  |  |  |  |  |  |
| Total | $3.46 \%$ | $-0.69 \%$ | $-3.12 \%$ | $5.51 \%$ | $5.03 \%$ |
|  |  |  |  |  |  |
| Fall | $-1.57 \%$ | $-2.06 \%$ | $-1.16 \%$ | $-0.11 \%$ | $-4.83 \%$ |
| Spring | $-1.73 \%$ | $-2.26 \%$ | $-1.89 \%$ | $0.96 \%$ | $-4.86 \%$ |

Percentage Change of Team numbers and Enrollment: University of North Texas

|  | $02-03-03-04$ | $03-04-04-05$ | $04-05-05-06$ | $05-06-06-07$ | $02-03-06-07$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
| Football | $-4.21 \%$ | $9.89 \%$ | $2.00 \%$ | $7.84 \%$ | $15.79 \%$ |  |  |
|  |  |  |  |  |  |  |  |
| Soccer | $-6.90 \%$ | $14.81 \%$ | $-1.61 \%$ | $36.07 \%$ | $43.10 \%$ |  |  |
|  |  |  |  |  |  |  |  |
| Volleyball | $-13.11 \%$ | $7.55 \%$ | $7.02 \%$ | $19.67 \%$ | $19.67 \%$ |  |  |
|  |  |  |  |  |  |  |  |
| Basketball | $-2.02 \%$ | $-9.28 \%$ | $17.05 \%$ | $4.85 \%$ | $9.09 \%$ |  |  |
|  |  |  |  |  |  |  |  |
| Softball | $34.00 \%$ | $4.48 \%$ | $1.43 \%$ | $4.23 \%$ | $48.00 \%$ |  |  |
|  |  |  |  |  |  |  |  |
| Total | $-0.28 \%$ | $4.14 \%$ | $5.57 \%$ | $12.56 \%$ | $23.42 \%$ |  |  |
|  | $2.92 \%$ | $0.29 \%$ | $2.86 \%$ | $1.24 \%$ | $7.49 \%$ |  |  |
| Fall | $0.96 \%$ | $0.67 \%$ | $1.04 \%$ |  | $6.05 \%$ |  |  |
| Spring |  |  |  |  |  |  |  |

Percentage Change of Team numbers and Enrollment: University of Houston

|  | 02-03-03-04 | 03-04-04-05 | 04-05-05-06 | 05-06-06-07 | 02-03-06-07 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Football | -10.64\% | 14.29\% | 20.83\% | -6.90\% | 14.89\% |
| Soccer | -28.21\% | -14.29\% | -4.17\% | 21.74\% | -28.21\% |
| Volleyball | -8.11\% | 17.65\% | -10.00\% | 25.00\% | 21.62\% |
| Basketball | 16.00\% | 18.97\% | -4.35\% | 18.18\% | 56.00\% |
| Softball | 50.00\% | -24.44\% | 11.76\% | -10.53\% | 13.33\% |
| Total | 1.97\% | 3.86\% | 2.79\% | 8.14\% | 17.73\% |
| Fall | 1.81\% | 0.33\% | -1.70\% | -0.72\% | -0.32\% |
| Spring | 1.16\% | -1.29\% | -1.40\% | -0.80\% | -2.34\% |

Percentage Change of Team numbers and Enrollment: Southwestern University

|  | $02-03-03-04$ | $03-04-04-05$ | $04-05-05-06$ | $05-06-06-07$ | $02-03-06-07$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
| Football | $10.71 \%$ | $-16.13 \%$ | $-15.38 \%$ | $22.73 \%$ | $-3.57 \%$ |  |  |
|  |  |  |  |  |  |  |  |
| Soccer | $-26.09 \%$ | $-5.88 \%$ | $-25.00 \%$ | $-16.67 \%$ | $-56.52 \%$ |  |  |
|  |  |  |  |  |  |  |  |
| Volleyball | $22.22 \%$ | $-42.42 \%$ | $-10.53 \%$ | $-5.88 \%$ | $-40.74 \%$ |  |  |
|  |  |  |  |  |  |  |  |
| Basketball | $17.24 \%$ | $-11.76 \%$ | $-33.33 \%$ | $10.00 \%$ | $-24.14 \%$ |  |  |
|  |  |  |  |  |  |  |  |
| Softball | $-24.00 \%$ | $52.63 \%$ | $-34.48 \%$ | $-10.53 \%$ | $-32.00 \%$ |  |  |
|  |  |  |  |  |  |  |  |
| Total | $1.52 \%$ | $-10.45 \%$ | $-25.00 \%$ | $2.22 \%$ | $-30.30 \%$ |  |  |
|  | $-4.17 \%$ | $0.95 \%$ | $2.58 \%$ | $-2.52 \%$ | $-3.26 \%$ |  |  |
| Fall | $-0.41 \%$ | $1.33 \%$ | $1.88 \%$ | $-1.85 \%$ | $0.91 \%$ |  |  |
| Spring |  |  |  |  |  |  |  |

Percentage Change of Team numbers and Enrollment: Texas Tech University

|  | $02-03-03-04$ | $03-04-04-05$ | $04-05-05-06$ | $05-06-06-07$ | $02-03-06-07$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
| Football | $9.17 \%$ | $-9.41 \%$ | $10.96 \%$ | $5.32 \%$ | $15.56 \%$ |  |  |
|  |  |  |  |  |  |  |  |
| Soccer | $-8.33 \%$ | $-15.91 \%$ | $-7.21 \%$ | $19.42 \%$ | $-14.58 \%$ |  |  |
|  |  |  |  |  |  |  |  |
| Volleyball | $28.68 \%$ | $-5.14 \%$ | $-4.82 \%$ | $24.68 \%$ | $44.85 \%$ |  |  |
|  |  |  |  |  |  |  |  |
| Basketball | $14.14 \%$ | $-2.31 \%$ | $3.54 \%$ | $-0.57 \%$ | $14.80 \%$ |  |  |
|  |  |  |  |  |  |  |  |
| Softball | $3.49 \%$ | $1.87 \%$ | $0.74 \%$ | $2.92 \%$ | $9.30 \%$ |  |  |
|  |  |  |  |  |  |  |  |
| Total | $9.32 \%$ | $-5.33 \%$ | $2.97 \%$ | $6.71 \%$ | $13.73 \%$ |  |  |
|  | $3.55 \%$ | $-0.78 \%$ | $-1.14 \%$ | $-0.02 \%$ | $1.55 \%$ |  |  |
| Fall | $2.45 \%$ | $-0.62 \%$ | $-0.40 \%$ | $-1.10 \%$ | $0.30 \%$ |  |  |
| Spring |  |  |  |  |  |  |  |

Percentage Change of Team numbers and Enrollment: Texas Christian University

|  | 02-03-03-04 | 03-04-04-05 | 04-05-05-06 | 05-06-06-07 | 02-03-06-07 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Football | 4.29\% | 17.81\% | 4.65\% | 14.44\% | 47.14\% |
| Soccer | 10.00\% | 0.00\% | 14.55\% | -4.76\% | 20.00\% |
| Volleyball | 8.00\% | 11.11\% | 10.00\% | -9.09\% | 20.00\% |
| Basketball | 1.54\% | 9.09\% | -2.78\% | 18.57\% | 27.69\% |
| Softball | 31.25\% | -21.43\% | 3.03\% | 17.65\% | 25.00\% |
| Total | 8.68\% | 4.94\% | 5.07\% | 8.97\% | 30.58\% |
| Fall | 3.38\% | 1.56\% | 0.14\% | 0.14\% | 5.29\% |
| Spring | 3.29\% | 0.43\% | 0.00\% | 2.44\% | 6.26\% |

Percentage Change of Team numbers and Enrollment: Angelo State University

|  | 02-03-03-04 | 03-04-04-05 | 04-05-05-06 | 05-06-06-07 | 02-03-06-07 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Football | -6.67\% | 30.36\% | -2.74\% | 61.97\% | 91.67\% |
| Soccer | -20.00\% | -25.00\% | 200.00\% | 144.44\% | 340.00\% |
| Volleyball | 0.00\% | 0.00\% | 16.28\% | 84.00\% | 113.95\% |
| Basketball | 20.00\% | 40.00\% | 26.19\% | 33.02\% | 182.00\% |
| Softball | 41.18\% | 5.56\% | 86.84\% | 16.20\% | 223.53\% |
| Total | 11.68\% | 17.99\% | 37.23\% | 43.93\% | 160.28\% |
| Fall | -3.59\% | 1.56\% | 0.31\% | 1.82\% | 0.00\% |
| Spring | -2.96\% | -0.27\% | 0.67\% | 0.38\% | -2.20\% |

Percentage Change of Team numbers and Enrollment: Stephen F. Austin University

|  | 02-03-03-04 | 03-04-04-05 | 04-05-05-06 | 05-06-06-07 | 02-03-06-07 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Football | - | - | - | 33.33\% | - |
| Soccer | - | - | - | 29.41\% | - |
| Volleyball | - | - | - | 103.13\% | - |
| Basketball | - | - | - | 43.24\% | - |
| Softball | - | - | - | 29.51\% | - |
|  | - | - | - | 43.84\% | - |
| Fall | 0.46\% | -1.06\% | 1.31\% | 2.81\% | 3.52\% |
| Spring | -1.54\% | -0.56\% | 0.61\% | 1.83\% | 0.31\% |

Percentage Change of Team numbers and Enrollment: Oklahoma State University

|  | $02-03-03-04$ | $03-04-04-05$ | $04-05-05-06$ | $05-06-06-07$ | $02-03-06-07$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Football | $-1.37 \%$ | $6.94 \%$ | $3.25 \%$ | $8.81 \%$ | $18.49 \%$ |
|  |  |  |  |  |  |
| Soccer | $2.33 \%$ | $-6.82 \%$ | $6.10 \%$ | $25.29 \%$ | $26.74 \%$ |
|  |  |  |  |  |  |
| Volleyball | $2.94 \%$ | $7.86 \%$ | $3.31 \%$ | $15.38 \%$ | $32.35 \%$ |
|  |  |  |  |  |  |
| Basketball | $-6.98 \%$ | $1.71 \%$ | $5.03 \%$ | $2.56 \%$ | $1.90 \%$ |
|  |  |  |  |  |  |
| Softball | $5.98 \%$ | $13.85 \%$ | $1.80 \%$ | $-5.31 \%$ | $16.30 \%$ |
|  |  |  |  |  |  |
|  | $-0.89 \%$ | $5.68 \%$ | $3.68 \%$ | $6.36 \%$ | $15.50 \%$ |
|  |  |  |  |  |  |
| Fall | $2.53 \%$ | $0.24 \%$ | $-0.71 \%$ | $0.61 \%$ | $2.67 \%$ |
| Spring | $2.03 \%$ | $-1.31 \%$ | $0.40 \%$ | $-1.18 \%$ | $-0.09 \%$ |

Percentage Change of Team numbers and Enrollment: Texas A\&M University

|  | $02-03-03-04$ | $03-04-04-05$ | $04-05-05-06$ | $05-06-06-07$ | $02-03-06-07$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Football | $-6.60 \%$ | $-3.54 \%$ | $-3.14 \%$ | $7.57 \%$ | $-6.13 \%$ |
|  |  |  |  |  |  |
| Soccer | $-10.77 \%$ | $2.87 \%$ | $2.79 \%$ | $23.37 \%$ | $16.41 \%$ |
|  |  |  |  |  |  |
| Volleyball | $-1.45 \%$ | $1.96 \%$ | $-14.90 \%$ | $2.82 \%$ | $-12.08 \%$ |
|  |  |  |  |  |  |
| Basketball | $-0.56 \%$ | $3.39 \%$ | $0.00 \%$ | $5.19 \%$ | $8.15 \%$ |
|  |  |  |  |  |  |
| Softball | $-6.96 \%$ | $3.15 \%$ | $0.38 \%$ | $4.18 \%$ | $0.37 \%$ |
|  |  |  |  |  |  |
| Total | $-5.02 \%$ | $1.09 \%$ | $-2.65 \%$ | $7.79 \%$ | $0.76 \%$ |
|  |  |  |  |  |  |
| Fall | $-0.60 \%$ | $-0.84 \%$ | $0.48 \%$ | $1.11 \%$ | $0.13 \%$ |
| Spring | $-1.23 \%$ | $-0.41 \%$ | $0.39 \%$ | $1.88 \%$ | $0.61 \%$ |

Percentage Change of Team numbers and Enrollment: University of Texas at Arlington

|  | $02-03-03-04$ | $03-04-04-05$ | $04-05-05-06$ | $05-06-06-07$ | $02-03-06-07$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Football | $9.80 \%$ | $-8.93 \%$ | $0.00 \%$ | $27.45 \%$ | $27.45 \%$ |
|  |  |  |  |  |  |
| Soccer | $-25.71 \%$ | $15.38 \%$ | $66.67 \%$ | $-14.00 \%$ | $22.86 \%$ |
|  |  |  |  |  |  |
| Volleyball | $-29.55 \%$ | $51.61 \%$ | $-14.89 \%$ | $12.50 \%$ | $2.27 \%$ |
|  |  |  |  |  |  |
| Basketball | $-2.53 \%$ | $-15.58 \%$ | $0.00 \%$ | $30.77 \%$ | $7.59 \%$ |
|  |  |  |  |  |  |
| Softball | $15.63 \%$ | $5.41 \%$ | $12.82 \%$ | $0.00 \%$ | $37.50 \%$ |
|  |  |  |  |  |  |
| Total | $-5.81 \%$ | $2.20 \%$ | $7.76 \%$ | $12.80 \%$ | $17.01 \%$ |
|  | $4.86 \%$ | $1.27 \%$ | $0.53 \%$ | $-2.14 \%$ | $4.48 \%$ |
| Fall | $7.06 \%$ | $-0.14 \%$ | $2.50 \%$ | $-4.97 \%$ | $4.13 \%$ |
| Spring |  |  |  |  |  |

Percentage Change of Team numbers and Enrollment: Tarleton State University

|  | $02-03-03-04$ | $03-04-04-05$ | $04-05-05-06$ | $05-06-06-07$ | $02-03-06-07$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Football | $-7.50 \%$ | $0.00 \%$ | $1.35 \%$ | $6.67 \%$ | $0.00 \%$ |
|  |  |  |  |  |  |
| Soccer | $76.92 \%$ | $-8.70 \%$ | $0.00 \%$ | $-4.76 \%$ | $53.85 \%$ |
|  |  |  |  |  |  |
| Volleyball | $9.52 \%$ | $8.70 \%$ | $0.00 \%$ | $32.00 \%$ | $57.14 \%$ |
|  |  |  |  |  |  |
| Basketball | $38.89 \%$ | $-12.00 \%$ | $-4.55 \%$ | $28.57 \%$ | $50.00 \%$ |
|  |  |  |  |  |  |
| Softball | $14.63 \%$ | $-3.19 \%$ | $6.59 \%$ | $3.09 \%$ | $21.95 \%$ |
|  |  |  |  |  |  |
| Total | $13.79 \%$ | $-3.41 \%$ | $1.96 \%$ | $10.38 \%$ | $23.71 \%$ |
|  |  |  |  |  |  |
| Fall | $5.47 \%$ | $2.07 \%$ | $3.28 \%$ | $2.52 \%$ | $13.98 \%$ |
| Spring | $5.82 \%$ | $2.07 \%$ | $2.37 \%$ | $1.03 \%$ | $11.71 \%$ |


|  | 02-03-03-04 | 03-04-04-05 | 04-05-05-06 | 05-06-06-07 | 03-04-06-07 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Football | - | 0.00\% | 31.43\% | -18.48\% | 7.14\% |
| Soccer | - | 54.55\% | -2.94\% | 6.06\% | 59.09\% |
| Volleyball | - | 44.44\% | -2.56\% | 7.89\% | 51.85\% |
| Basketball | - | 1.79\% | 8.77\% | 17.74\% | 30.36\% |
| Softball | - | 34.78\% | 6.45\% | 0.00\% | 43.48\% |
| Total | - | 20.08\% | 10.58\% | -0.31\% | 32.38\% |
| Fall | 2.82\% | 6.77\% | 6.86\% | 3.76\% | 21.72\% |
| Spring | 6.62\% | 6.24\% | 5.61\% | 4.13\% | 24.57\% |

## Appendix D

Total Number of teams in Region

|  | $2006-2007$ | $2005-2006$ | $2004-2005$ | $2003-2004$ | $2002-2003$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Football | 3369 | 3215 | 3048 | 3058 | 2962 |
| Soccer | 2242 | 2130 | 2080 | 2078 | 2079 |
| Volleyball | 2477 | 2289 | 2290 | 2245 | 2172 |
| Basketball | 3335 | 3186 | 3114 | 3111 | 2994 |
| Softball | 2911 | 2854 | 2726 | 2680 | 2496 |
|  |  |  |  |  |  |
| Total | 8470 | 7810 | 7394 | 7308 | 6839 |

Total Enrollment for Region

| Fall '02 | 282,851 | Spring '05 | 273,416 |
| :--- | :--- | :--- | ---: |
| Spring '03 | 270,747 | Fall '05 | 288,286 |
| Fall '03 | 287,027 | Spring '06 | 274,003 |
| Spring '04 | 274,316 | Fall '06 | 289,155 |
| Fall '04 | 287,493 | Spring '07 | 275,283 |

Total Percentage Change in Total Teams in Region

|  | $02-03-03-04$ | $03-04-04-05$ | $04-05-05-06$ | $05-06-06-07$ | $02-03-06-07$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Football | $3.24 \%$ | $-0.33 \%$ | $5.48 \%$ | $4.79 \%$ | $13.74 \%$ |
| Soccer | $-0.05 \%$ | $0.10 \%$ | $2.40 \%$ | $5.26 \%$ | $7.84 \%$ |
| Volleyball | $3.36 \%$ | $2.00 \%$ | $-0.04 \%$ | $8.21 \%$ | $14.04 \%$ |
| Basketball | $3.91 \%$ | $0.10 \%$ | $2.31 \%$ | $4.68 \%$ | $11.39 \%$ |
| Softball | $7.37 \%$ | $1.72 \%$ | $4.70 \%$ | $2.00 \%$ | $16.63 \%$ |
|  |  |  |  |  |  |
| Total | $6.86 \%$ | $1.18 \%$ | $5.63 \%$ | $8.45 \%$ | $23.85 \%$ |

Percentage Change in Total Enrollment in Region
Fall
Spring

| $1.48 \%$ | $0.16 \%$ | $0.28 \%$ | $0.30 \%$ | $2.23 \%$ |
| ---: | ---: | ---: | ---: | ---: |
| $1.32 \%$ | $-0.33 \%$ | $0.21 \%$ | $0.47 \%$ | $1.68 \%$ |

## Appendix E





University of North Texas







## Texas Tech University








## Stephen F. Austin State University















VITA

Jack Alfred Harper<br>Candidate for the Degree of<br>Master of Science

## Thesis: PARTICIPATION TRENDS IN INTRAMURAL SPORTS IN TEXAS AND OKLAHOMA

Major Field: LEISURE SERVICE MANAGEMENT
Biographical:
Education:
Bachelors of Science in Exercise \& Sport Science at Texas Tech University, Lubbock, TX, in December 2003
Completed the requirements for the Master of Science in Leisure Service Management at Oklahoma State University, Stillwater, Oklahoma in May 2008.

Experience:
Graduate Assistant Intramural Sports - Oklahoma State University Intramural Coordinator - Southern Methodist University

Professional Memberships:
National Intramural \& Recreational Sports Association


[^0]:    *For the purposes of this study a professional is defined as any graduate assistant, intern or full time employee whose primary responsibility is the administration of intramural sports.

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