A Relationship Study Comparing Satisfaction, Participation, and Commitment to Intramural and Club Sports with Students' Intention to Return to Campus

Kevin Reynolds
Winthrop University, reynoldsk2@gmail.com

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To the Dean of the Graduate School:

We are submitting a thesis written by Kevin Reynolds entitled A RELATIONSHIP STUDY COMPARING SATISFACTION, PARTICIPATION, AND COMMITMENT TO INTRAMURAL AND CLUB SPORTS WITH STUDENTS’ INTENTION TO RETURN TO CAMPUS.

We recommend acceptance in partial fulfillment of the requirements for the degree of Master of Science in Sport and Fitness Administration through the Richard W. Riley College of Education.

____________________
Dr. Jinwook Jason Chung, Thesis Committee Chair

____________________
Dr. Kristi Schoepfer, Committee Member

____________________
Dr. David Schary, Committee Member

____________________
Dr. Jennie Rakestraw, Dean, College of Education

____________________
Dr. Jack DeRochi, Dean, Graduate School
A RELATIONSHIP STUDY COMPARING SATISFACTION, PARTICIPATION, AND COMMITMENT TO INTRAMURAL AND CLUB SPORTS WITH STUDENTS’ INTENTION TO RETURN TO CAMPUS.

A Thesis
Presented to the Faculty
Of the
Richard W. Riley College of Education
In Partial Fulfillment
Of the
Master of Science
In Sport and Fitness Administration
Winthrop University

August, 2016

By
Kevin Reynolds
Abstract
Recruitment and retention is a crucial and central goal for almost all higher education institutions. Therefore, it is important for universities and colleges to provide diverse activities and events to keep the students and prospective students interested and engaged. Previous research suggests that intramural and club sports programs are activities that could help increase recruitment and retention (McElveen & Rossow, 2014; Kampf & Teske, 2013). There is still a need, however, to show the impact of participation in intramural and club sports on a student’s intention to return to campus. This study examined how participation, commitment, and satisfaction levels effect a student’s intention to return to campus the following semester. The sample consisted of 140 students that responded to the questionnaire but only 82 (58.6%) of those were usable (57.3% male and 42.7% female). Results of this study showed that participation levels had no significant effect on retention of the student for both intramural and club sports (.067 and .162 respectively). However, commitment and satisfaction had a significant impact on the student’s intention to return for the intramural and club sports programs (intramural = .035 & .012; club sports = .016 & .017 respectively). These results show that overall experience of intramural and club sports matter much more to the student’s behavior than level of participation. Universities/colleges should be focusing more on the satisfaction of their participants to keep them committed to continue playing and coming back to campus the following year.
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Chapter 1
Introduction

Intramural sports are organized sports that take place within an institution that allows its students to play against each other in a less competitive nature than varsity sports (McElveen & Rossow, 2014). Club sports, however, tend to be more competitive than their intramural counterparts. A club sport is often the middle ground between intramural and varsity sports because they offer the opportunity of higher competition in a recreational environment (Lower, Turner, & Petersen, 2013). Club teams play against other institutions’ club teams instead of playing against teams within the same institution. Intramural and club sport participation may seem like just a perk of going to a college or university, but in actuality, they can be used as a marketing tool to help with recruitment and retention for the university/college.

There can also be a link in participation in recreational sport programs (e.g. intramural sports, club sports, etc.) and retention rates for the university/college. Previous research has shown that intramural sports have been recognized as a positive factor in the student’s recruitment, retention and satisfaction (McElveen & Rossow, 2014). In addition, experience with intramural (Lindsey & Sessoms, 2006) and club sports (Kampf & Teske, 2013) have positive effect on the student’s overall satisfaction with their college experience and make positive contributions towards intention to return to campus. Furthermore, it has been suggested that recreational participation in intramural and club sports have a direct impact on the university’s retention rates of first year students as well as keeping them engaged in other campus life activities (Moffitt, 2010). For example, first year students chose to leave the university because they did not find a social group
within the first year of school. McElveen and Rossow (2014) stated that intramural and club sports are a medium to create a social group for those first year students. There are many studies examining the benefits of participating in intramural and club sports on social interaction (Lower et al., 2013), improvement on ability to work with a diverse group (Artinger et al., 2006), and stress reduction (Lindsey, Sessoms, & Willis, 2009). However, studies on intramural and club sport programs and students’ psychological perception (e.g., satisfaction, commitment) of these programs have not been examined. Thus, the purpose of this study is to investigate how participation, commitment, and satisfaction levels influence students’ intention to return to campus for the following academic year. The current study will provide recommendations of how universities/colleges can emphasize the intramural and club sport programs.

According to previous research, it has been suggested that the level of participation has a direct impact on the student’s intention of returning to campus as well as their commitment to the university (Kampf & Teske, 2013). Kampf and Teske (2013) revealed, in their study, that 86.1% of students that participated in club sports returned to campus the following year. Intramural sports provides a powerful medium for student interaction both with other students or the intramural department, furthering their satisfaction levels with the university (Artinger et al., 2006). If a student shows higher levels of participation then they are more likely to return to campus barring any outside and unforeseen circumstances. If students are less satisfied by intramural or club sports then they could be less likely to have a commitment towards those sports and are therefore unlikely to continue those activities in the future. If recreation centers can better
understand what keeps students coming back to campus, then they can better serve those areas to make them even more attractive to current students. This study examined student’s participation levels and their effect on retention, but also looking at commitment and satisfaction levels to examine which is the most significant to students and their decision to return to campus.

Commitment in sports has always been an intriguing branch of sports psychology. Researchers often try to link a specific motivator or reason for players or fans to be committed to a certain organization or team. Among sociologists, commitment has been regarded as a primary social factor that directs individuals to a consistent line of action (Kim, James, & Kim, 2013). Commitment has been defined as the level of an individual’s psychological attachment, which does not seem significantly affected by social factors (Kim et al., 2013). Additionally, the value of affective commitment reflects an emotional attachment such as the highly committed individual is involved in and enjoys membership in the organization (Kim et al., 2013). This means that greater sense of commitment can be generated from intramural and/or club sports participation, if the individual enjoys being a part of that particular team than those who do not enjoy being a part of the team. Previous research in business supports these notions, showing that individuals who are emotionally involved to a particular service are far more likely to continue doing business and/or evaluate the service more positively (Mahony, Madrigal, & Howard, 2000). For these reasons, this study will focus on commitment level as a primary independent variable, exploring how it may influence students’ intention to return to campus.
Satisfaction is an evaluation of an emotion which reflects the amount that a participant believes that their use of the service evoked positive feelings towards the program (Cronin, Brady, & Hult, 2000). In this study, satisfaction level was measured by the student’s self-perceived positive feelings towards the intramural and club sports programs. Murray and Howat (2002) examined the impact of service quality on customer satisfaction and behavior intentions. The study explained service quality as a pivotal mechanism for behavioral intentions by providing a service that results in satisfied customers will generally improve profitability for any organization that operates in a consumer market (Murray & Howat, 2002). The study also stated that the satisfaction of customers was positively related to their willingness to recommend the service, leading to more students participating (Murray & Howat, 2002). Their study showed a significant link between perceived service quality and satisfaction, which in turn affected the customer’s future intentions. This model can directly be applied to the intramural and club sports program as it is a customer service entity at a university relying on its customer’s (i.e., the student) return to campus.

The primary dependent variable examined in this study is intention to return to campus (i.e., retention). A focal point of universities/colleges around the United States is to increase the retention rate. This study will highlight some of the important reasons for the increased focus on retention. With universities or colleges around the United States looking for ways to continue and expand the retention of their students, campus recreation, specifically intramural and club sports, could be one of the primary reasons for students returning to campus. The primary aim of this study is to explore the role of
higher participation, commitment, and satisfaction levels of intramural and club sports on a student’s intention to return to campus.

**Hypothesis**

This study investigated how the levels of participation, commitment, and satisfaction can influence the students’ intention to return to campus.

Hypothesis 1 (H1): As students’ participation level in intramural sports increase, intention to return to campus will increase.

Hypothesis 2 (H2): As students’ participation level in club sports increase, intention to return to campus will increase.

Hypothesis 3 (H3): As students’ commitment level in intramural sports increase the intention to return to campus will increase.

Hypothesis 4 (H4): As students’ commitment level in club sports increase the intention to return to campus will increase.

Hypothesis 5 (H5): As students’ satisfaction level in intramural sports increase the intention to return to campus will increase.

Hypothesis 6 (H6): As students’ satisfaction level in club sports increase the intention to return to campus will increase.

**Delimitations**

The study was delimited by the following:

1. The study only applies to universities or colleges around the United States and does not include other sport industries such as city recreation centers.
2. The sample size was small for a southeastern university.
3. The sample was only consisted of current students (no former students were surveyed)

**Limitations**

The study was limited by the following:

1. This study does not account for students that are not returning to campus because of non-academic reasons (e.g., graduation, financial reasons, poor academics, etc).
2. All of the survey questions were self-reported.
3. Low response rate.

**Definition of Terms**

For the purpose of this study, the following terms were operationally defined:

**Club Sports.** Recreational sports organized within a university. Usually more competitive than intramural sports as they practice regularly throughout the week and play teams from other universities/colleges (Lower et al., 2013).

**Commitment.** This refers to the degree of an individual’s psychological attachment to an association, additionally, the value of affective commitment reflects an emotional attachment to the organization (Kim et al., 2013).

**Intramural Sports.** Recreational sports organized within a university. Teams from a university play other teams within the same university (Oxford, 2016).

**NIRSA.** National Intramural and Recreational Sport Association; this is the governing body for all recreational services programs.

**Retention.** This refers to the student returning to campus the following semester. This is often referred to as intention to return in this study (Oxford, 2016).
**Satisfaction.** This refers to the evaluation of an emotion which suggests that it reflects the amount that a consumer believes that their use of the service evoked positive feelings towards the program (Cronin et al., 2000).
Chapter 2  
Literature Review

Retention and Intramural Sports

Moffitt (2010) conducted a study to examine the relationship between participation in intramural sports and the student’s satisfaction with the collegiate experience. The survey gauged satisfaction levels of the students studied regarding their collegiate experience as a whole. The study showed that there was a significant difference in satisfaction between participating individuals and non-participating individuals with regards to academic life and campus life. The study expanded upon the satisfaction of the students that participates by asking about their satisfaction of the sport they participated in. The study found that satisfaction levels approached significance as the participation levels increased.

Sturts and Ross (2013) also examined whether students who participate in intramural sports are more likely to be satisfied with their university by feeling as if they belong to a community. The study, like Moffitt’s, revealed that the student population saw benefits from participating in intramural sports including the sense of belonging to a community or to the university itself. Female students had the most satisfaction with participating in intramural sports by both feeling a sense of community and also a greater sense of tolerance for different cultures. This sense of community, particularly with the first year students, is a major force to help the university with retention of its students. Overall, these findings support the current study’s hypotheses indicating higher satisfaction levels will mean higher intention to return for those students.
McElveen and Rossow (2014) examined how intramural participation affects academic performance and retention rates in first time in college students (i.e., students who have never been enrolled at an institution for higher learning). Intramural participation level for all students were tracked during the fall semester and the immediately following spring semester. Retention rates were also obtained by cross-referencing the intramural database and the institutional database. McElveen and Rossow (2014) found that 96.5% of those that participated in intramural sports came back from the fall to the spring semester while only 91.8% of those who did not participate in intramural sports returned from the fall to the spring semester. From the fall semester to the following fall semester 79.8% of those that participated in intramural sports returned to the college while only 73.9% of those that did not participate in intramural sports returned. The study showed that those who participated in intramural sports had a higher retention rate than those that did not participate.

Danbert, Pivarnik, McNeil, and Washington (2013) also examined academic success but through the lens of a university recreational sports and fitness center. The study concluded that more fitness facility members were still enrolled after two years than nonmembers; 74% to 60% respectively, furthering the positive impact that recreation has on the student’s intention to return to campus (Danbert et al., 2013).

**Retention and Club Sports**

Universities and colleges around the country are searching for ways to recruit and retain potential students to come to their university and stay enrolled. Unfortunately, there is a lack of significant research on the topic of how club sports helps with the
Retention of students at universities or colleges. However, Kampf and Teske (2013) did examine a correlation between participation (and employment) in recreational sports and the school’s retention of those students. The Division of Student Affairs provided participation numbers for the club sport enrollment, campus recreation student employment status, and student recreation center entry counts kept track by an electronic swipe counter. The study showed that 86.1% of those that participated in club sports returned to school the following year (Kampf & Teske, 2013). Impressively, first year students that were employed by campus recreation had a 100% retention rate of those first year students. The study showed positive correlations between participating, being employed, using the recreation center and retention rates for the university. This current study will build upon these results by examining the impact of club sports on retention.

**Retention and Campus Recreation**

Miller (2011) conducted a study to determine the impact of a university recreation center on social belonging. The study indicated that the student recreation center created a social bonding by establishing relationships between students, and the study revealed that the students saw professors working out at the recreation center on a regular basis. Similarly, Lindsey and Sessoms (2006) studied retention numbers based on participation in Campus Recreation. Lindsey and Sessoms designed the survey, so institutions interested could examine the impact of recreational sports activity on student recruitment, retention, satisfaction. According to the survey only 31% of those questioned reported that availability of recreational sports was important/very important in deciding to attend the college, additionally, 37.7% reported that the availability of recreational sports was
important/very important in deciding whether or not to continue attending the college. Of those surveyed 83% reported that they participate in some form of recreational sport once per week while 40% report that they participate in four recreational sports per week. About 94% stated that they would like to participate in some form of recreational sport every week. This current study will examine the different aspects of keeping participants satisfied and committed and how to best utilize them to help increase participation levels.

**Impact of Intramural and Club Sports on Students**

There have been a multitude of studies on the psychological impacts of intramural and club sports on students and their perceived benefits of participating (Artinger et al., 2006; Lower et al., 2013; Spivey and Hritz, 2013). Spivey and Hritz (2013) conducted a longitudinal study that examined limited constraints to their recreational sport participation, and identified the many positive benefits of regular recreational sport and fitness participation. The study was aimed towards investigating 1) a profile of student participation in campus recreation activities; 2) benefits and limitations students experience with participation in campus recreational sports; 3) differences between high and low user groups of campus recreation; and 4) differences in class designation and the benefits and limits of participation in recreational sports. The constraints in the study were more consistent over the course of the whole survey indicating that people who did not participate in recreational sports said that they did not “have enough time.” The second highest answer for not participating was “not enough fitness equipment.” This study can be used to determine the perceived benefits and constraints of the students for
participating to further a program to help cater to those needs and increase the satisfaction levels of those participants.

Lower et al. (2013) and Artinger et al. (2006) both conducted a comparative study of the perceived benefits associate with participation in different recreational services program areas (i.e. group fitness, intramural sports, and sport clubs). In their study, there were significant differences in the perceived benefits between recreational program areas, with club sports reporting the greatest mean in the four perceived benefit groups (i.e., overall, social, intellectual, fitness; Lower et al., 2013). Conversely, Artinger et al. (2006) focused more on the benefit of participating in intramural sports and the sense of community by the undergraduate students. Recreational sports programs should be associating participation with the broader university goals of retention by putting an emphasis on the social benefits of participation of the various sport offerings. Artinger et al. also studied what social benefits are attained through participating in intramural sports and compared the differences between males and females; those who participated in the men’s only, women’s only, or coed intramural leagues; first-, second-, third-, and fourth-year students; and students who live in residence halls versus students living off campus. This study showed that the student living off campus verses on campus did not have an impact on the number of intramural sports being played. Conversely, the more intramural sports a student participated in, the higher their sense of belonging was which furthered their perceived benefits.

**Conclusion**
Previous research has shown that intramural and club sports participation has positive effects on the satisfaction of the students. Students that participate also have higher intention to return to campus than those who do not participate. However, there is a lack of previous research examining commitment levels to both intramural and club sports and how that impacts a student’s intention to return to campus. The current study will add to the body of literature on participation levels and supplement the lack of research on commitment and satisfaction of intramural and club sports.
Chapter 3

Methodology

Samples

The sample consisted of undergraduate and graduate students at a southeastern university that have participated in either intramural or club sports within the current academic year. There were a total of 140 students that responded to the survey but only 82 (58.6%) of those were usable. Those that were unusable answered that they have not participated in either intramural or club sports. As seen in Table 1, 57.3% were male and 42.7% were female. The majority of the students surveyed were juniors (32.9%), followed by seniors (23.2%), sophomores (17.1%), then both graduate students and freshmen (13.4%; see Table 2).

Procedures

The survey was given to students in multiple ways including email, self-administered at intramural games, club sports practices, and it was offered to students in the classrooms that were visited by the survey administrators. The survey was emailed to all students that participated in intramural and club sports. In addition, a hard copy of the survey was given to current club members at their practices and intramural participants at their scheduled games. To avoid multiple entries from the same person, the students were explicitly told not to complete the survey more than once. Only those that completed the survey were used for the data analysis.

Before the survey was distributed to the participants, participants agreed to a written statement documenting the purpose and qualifications for participation. In
addition, participants were asked two qualifying questions, age and enrolled status. If a student did not qualify, the survey ended with the debriefing form. After the qualifying questions, the survey then split into two groups of questions: Intramural sports and Club sports. Each topic had six questions on commitment and satisfaction, followed by three questions discussing the students’ intention to return to campus the following semester. At the end of the survey a debriefing form was displayed explaining the study’s purpose.

After the data was collected each response was categorized into one of three groups. As seen in Table 3, Group 1 consisted of those that only participated in intramural sports (47.6%); Group 2 consisted of those that only participated in club sports (20.7%); and Group 3 had students that participated in both intramural and club sports (31.7%). The study was approved by the University Institutional Review Board.

Instruments

**Participation.** Participation level in this study was defined by the amount of hours per week in which the participant took part in an intramural or club sport during that academic year. The level of participation was measured through the question: ‘how many hours per week do you participate in (intramural and club sport)?’ The number of hours determined the level of participation. This response was self-reported.

**Commitment.** Commitment level in this study was measured using a modified scale developed by Price and Arnould (1999). This study modified the questions to be more exact to intramural and club sports (e.g., instead of a question reading “I would expend extra effort to continue seeing this ___” it reads “I would expend extra hours per week to continue participating in intramural and club sports”). Price and Arnould’s study
was found to be a reliable measure of commitment to a service provider ($\alpha = .79$). In the previous study the scale was used to measure the extent to which one person (i.e., a client) expresses intentions to continue a relationship with another person/party (i.e., professional service provider). This response was self-reported.

**Satisfaction.** Satisfaction was measured using a slightly modified version of Keaveney and Parhasarathey (2001) to better fit intramural and club sports (e.g., instead of stating “this/that service” it was written with intramural and club sports for that service). This scale was found to be a reliable measure of satisfaction ($\alpha = .75$; Keaveney and Parhasarathey, 2001). In the previous study the scale was used to gauge the general level of satisfaction a person expresses with regard to some specific service experience.

**Intention to Return.** Intention to return in this study was measured using a modified scale developed by Cronin et al., (2000). The questions were modified to be more specific towards intramural and club sports (e.g., instead of a question reading “the probability that I will use this ___ again is” it reads “the probability that I will return to campus next semester is”). Cronin et al. found their study to be a reliable scale in their previous study ($\alpha = .87$). In the previous study the scale measured the likelihood that a person will use some object again (goods, services, facilities and even people). This response was self-reported.

**Statistical Analysis**

The survey responses and correlations were recorded and interpreted using the SPSS Statistics Program V.22 (IBM Corporation, Armonk, NY). Descriptive statistics
were calculated and the hypothesized relationships were tested using Univariate Analysis of Variance (ANOVA).
Chapter 4

Results

Reliability

The data analyses revealed that Cronbach’s Alphas reached a satisfactory level of reliability for intramurals (commitment $\alpha = .79$; satisfaction $\alpha = .56$), club sports (commitment $\alpha = .88$; satisfaction $\alpha = .67$), and intention to return to campus ($\alpha = .59$).

Descriptive Statistics

As seen in Table 4, the summated mean of participation in intramural sports was 3.37 ($SD = 1.23$, range 2–6) and club sports was 4.56 ($SD = 1.01$, range 2–6). The summated mean of commitment in intramural sports was 10.81 ($SD = 2.80$, range 3-15) and club sports was 12.20 ($SD = 2.23$, range 6-13). Finally, the summated mean of satisfaction in intramural sports was 12.27 ($SD = 2.44$, range 7-15) and club sports was 12.51 ($SD = 2.25$, range 8-15).

Intramural Sports. A main effect was not found for participation in intramural sports on intention to return to campus ($F(1, 65) = 3.47, p < .05, \eta^2 = 0.05$), which does not support H1. There was no significance shown between participation levels in intramural sports and the student’s intention on returning to campus. However, Figure 1 shows that students had a lower intention to return ($M = 12.49, SD = 2.76$) than students who participated more hours per week in intramurals ($M = 13.73, SD = 2.03$). A main effect was found for commitment to intramural sports on intention to return to campus ($F(1, 65) = 4.63, p < .05, \eta^2 = .07$), which supports H2. The commitment levels of the students had a significant role in whether they would return to campus or not. Figure 2
shows that students had a lower intention to return ($M = 12.32$, $SD = 2.96$) than students who had higher levels of commitment towards intramural sports ($M = 13.68$, $SD = 1.74$). A main effect was found for satisfaction of intramural sports on intention to return to campus ($F(1, 65) = 6.70, p < .05, \eta^2 = .10$), which supported H3. The satisfaction levels of the students had a significant role on them returning to campus or not. Figure 3 shows that students had a lower intention to return ($M = 12.17$, $SD = 2.93$) than students who had higher levels of satisfaction for intramural sports ($M = 13.77$, $SD = 1.81$).

**Club Sports.** A main effect was not found for participation in club sports on intent ($F(1, 43) = 2.03, p < .05, \eta^2 = 0.05$), which does not support H4. There was no significance found between the student’s participation in club sports and their intention to return to campus. Figure 4 shows that students had a lower intention to return ($M = 13.35$, $SD = 2.45$) than students who participated in more club sports per week ($M = 14.15$, $SD = 1.22$). A main effect was found for commitment to club sports on intention to return to campus ($F(1, 43) = 6.34, p < .05, \eta^2 = 0.13$), which supported H5. There was a significance between the commitment to club sports and the student’s intention to return to campus. Figure 5 shows that students had a lower intention to return ($M = 13.25$, $SD = .69$) than students who had higher commitment levels towards club sports ($M = 13.73$, $SD = 2.03$). A main effect was found for satisfaction of club sports on intention to return to campus ($F(1, 43) = 6.15, p < .05, \eta^2 = 0.13$), which supported H6. There was a significance between the satisfaction of club sports and the student’s intention to return to campus. Figure 1 shows that students had a lower intention to return ($M = 13.11$, $SD = 2.36$) than students who participated more ($M = 14.42$, $SD = .97$; See Table 4).
Chapter 5
Discussion

The current study was based on the hypotheses that higher levels of participation in intramural and club sports resulted in higher levels of commitment and satisfaction, which ultimately led to higher levels of student retention as the student was more likely to return to campus for the following semester. Based upon existing literature, this study focused on similar topics of participation levels but also examined the psychological reasoning for students coming back to campus through commitment and satisfaction. There is a lack of previous research on commitment and satisfaction (considerably so with regards to club sports); as such, it was a necessary research topic.

Proposed hypotheses H1 and H2 (that considered participation) were not supported. Proposed hypotheses H3, H4, H5, and H6 were all supported. The results indicate that commitment and satisfaction levels had a significant effect on the student’s intention to return to campus. However, the testing did not find participation levels to be significant to the student’s intent.

There may be few reasons that H1 and H2 were not supported. First, if students are just showing up to their intramural or club sports teams but not giving their best effort, then that will likely have little impact on their decision to return to campus. In addition, if the student has a bad experience with the intramural or club sport then that will not have any positive impact on them and may actually effect their choice to return to campus negatively. Another reason that participation levels may not have a significant impact on a student’s decision to return to campus could be that the student finds some
other form of recreational sport that took the place of an intramural or club sport. While not captured by the results, this could also positively impact the students’ intention to return to campus. Future research should explore each of these reasons.

This finding also suggested that the level of participation has little significance in the student’s intention to return to campus. This means that universities/colleges should begin to focus more on the other components of intramural and club sports and not just focusing on participation numbers, such as experience and level of satisfaction with their participation in intramural and club sports. Focusing on the experience can include things like playing championship games of intramural sports at the varsity sports venues on campus or offering multiple options for champions of sports for prizes (e.g., headbands, T-shirts, team trophy, etc.).

Both H3 and H4 were both supported, thus higher levels of commitment were shown to lead to higher intention to return for the students. There can be a few reasons for those consequences. If a student is more committed towards, intramural and club sports, they will find it difficult to stop participating. Students who have higher levels of commitment often have feelings or beliefs towards their actions (Mahony et al., 2000). Similar to Mahony et al. (2000), the current study showed that higher commitment levels led to higher intention to return. Students could also have a higher sense of commitment towards their intramural and club sport because they have either made friends with the other participants or they started the team with their friends, making it more difficult to leave those behind. This finding suggests that the universities/colleges should be focusing on how to get students committed to playing intramural and club sports. Since there is a
significant correlation between commitment and intention to return, universities/colleges should investigate what get the students committed to playing that sport and implement those findings.

Finally, H5 and H6 were supported in that higher levels of satisfaction were shown to lead to higher intention to return for the students. Higher levels of satisfaction can lead to repeat participation because the student already enjoyed the experience once and would like to do so again. If the students are playing together as friends on their intramural and club sport team, then they are likely to have a higher satisfaction level because it is an enjoyable social event. Another reason that satisfaction levels were higher could be that some of the participants may have played a sport in high school, and since the university offered that sport in either an intramural or a club sport setting, the student had the opportunity to continue playing a sport they love. These results mean that universities/colleges should put a focus on satisfying the students by using the social aspect of sports to their advantage. Instead of focusing on only offering the sports and hoping students will participate, universities/colleges should put an emphasis on the social aspect offered by intramural and club sports. A social focus for intramural and club sports could be offering a coupon to teams for a local restaurant for teams to go after playing their game to increase their team bonding.

**Practical Implications.** The results of this study have significant implications for the recreational sports field. The study revealed that a student’s commitment and satisfaction levels are more significant than the participation levels. This is important for multiple reasons. First, instead of just trying to get high numbers for participation,
intramural and club sports need to focus on the quality of the sports they offer. This means offering sports that are organized, specifically having clear rules that are enforced with trained officials. Additionally, providing proper and adequate field space are small, affordable steps that can help increase enjoyment and satisfaction among the participants.

Second, intramural and club sports can intentionally market towards student groups to get them interested in participating together in a sport that they all enjoy. For example, most universities/colleges have Greek organizations that can be targeted for both intramural and club sports. There can even be measures taken that allow them to only play other Greek organizations, intramurals could organize a “Greek only” league that allows fraternities and sororities to play against other fraternities and sororities. The students that are in those organizations would enjoy playing with their close friends that are in their fraternities and sororities, furthering their satisfaction levels. Intramural and club sports can also market directly to first-year students in an attempt to help them establish a social circle. If a first-year student makes friends while playing intramural and club sports they will likely keep those friends and continue participating in those sports with those same friends as they progress through their college experience.

Finally, the results of this study can be used by intramural and club sport professionals to better understand what aspects of recreational sports to focus on with their students to keep them returning to campus year to year. Maybe instead of having multiple sports going on at the same time (increasing the amount of hours per week a student is participating in) the professional should maybe only offer one sport and focus on the quality of that sport to improve the satisfaction level of that student. The goal of
the intramural and club sports program is to offer high quality sports that are enjoyable to the students to keep them engaged in recreational sports throughout their college experience.
Appendices
Appendix A

IRB forms

Winthrop University

REQUEST FOR REVIEW OF RESEARCH INVOLVING HUMAN SUBJECTS
Institutional Review Board

INSTRUCTIONS

1. Always secure the most recent version of this form from the website. Failure to use the most recent version could result in the protocol being returned to you.

2. The form may be completed on-line and then printed out in order to obtain necessary signatures.

3. Ensure that all items are completed on the Request for Review form.

4. You must attach to the Request for Review form all related materials such as:

☑ Informed Consent, Parental Permission and/or Subject Assent forms

☐ Copies of recruitment materials, including emails, flyers, letters, etc.

☑ Copies of surveys to be used in the study

☐ Copies of interview questions to be used in the study

☑ Debriefing Form

☐ Copies of all other materials to be used in the study, such as pictures, videos, website URL’s, etc.

SUBMISSION

You may submit this Request for Review either electronically or in paper copy form, but you do not have to submit both electronically and on paper.

1. Electronic Submission – You will need to print out the form in order to obtain all appropriate signatures. Then prepare an electronic file, combining a scanned copy of the Signed Request for Review and all related materials into one .pdf file. Arrange this file in the order shown in the check list above. Do not include this instruction page in your .pdf file. Electronic files not arranged in accordance with the check list above will be returned to you for correction. Send the electronic copy to Deborah Broome, Compliance Officer at broomed@wintrop.edu.

OR

2. Paper Copy – Submit a paper copy of the Signed Request for Review form and attachments to the SPAR Office at Rm. 149 McLaurin Bldg.
Winthrop University
REQUEST FOR REVIEW OF RESEARCH INVOLVING HUMAN SUBJECTS
Institutional Review Board

RESEARCHER of RECORD: Kevin Reynolds
COLLEGE/DEPARTMENT: College of Education
PHONE number: HOME: N/A WORK: 803.323.4884
EMAIL: reynoldsk2@winthrop.edu CELL PHONE:
ADDRESS:

STATUS: □ Faculty or Staff
   (If a student, complete faculty advisor section)
      □ Graduate Student
      □ Undergraduate Student

CO-RESEARCHERS:
FACULTY ADVISOR: Dr. Jinwook Chung
ADVISOR PHONE: HOME: N/A WORK: 803.323.3376
EMAIL: chungji@winthrop.edu CELL PHONE: N/A
ADDRESS:

TITLE OF RESEARCH: A relationship study comparing satisfaction, participation, and commitment to Intramural
and Club sports with student retention rates.

DATES OF THE RESEARCH PROJECT:
Approval Requested for Start Date: 2/20/2016 (The requested start date should be at least
2 weeks after the next scheduled meeting of the IRB)
End Date: 3/10/2016 (Maximum of one year; must be renewed annually)

IS THIS RESEARCH BEING FUNDED BY RESEARCH GRANT?
□ YES; Sponsor:
   □ Funding Applied for; Sponsor:
   □ NO

• Yes □ No Is this activity being carried out by student as a classroom assignment
to be reviewed by the faculty member.

• Yes □ No Will the information gathered or developed in this activity be used in
   a presentation or publication outside of the classroom?

   If you checked Yes to both questions above, please explain how the information will
   be used outside of the classroom: This is a masters thesis which may be presented at a
   conference or in a professional publication.

INDICATE THE TYPES OF MEMBERS OF THE RESEARCH TEAM WHO WILL HAVE DIRECT CONTACT WITH HUMAN
SUBJECTS:

□ FACULTY MEMBER
□ STAFF MEMBER
□ UNDERGRADUATE STUDENT
□ GRADUATE STUDENT
□ OTHER; SPECIFY:
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. BRIEFLY DESCRIBE THE PURPOSE OF THE RESEARCH IN NON-TECHNICAL LANGUAGE:</td>
<td>The purpose of this study is to examine how participation, satisfaction, &amp; commitment level of intramural and club sports influence student's intention of returning to campus.</td>
<td></td>
</tr>
<tr>
<td>B. DESCRIBE RESEARCH PROTOCOL OR METHODOLOGY TO BE USED:</td>
<td>A survey will be sent out to students through Qualtrics and given to students in paper form around campus. The survey will include participation, satisfaction, commitment level, and intention to return questions.</td>
<td></td>
</tr>
<tr>
<td>EXPLAIN BRIEFLY BUT COMPLETLY WHAT TASKS OR ACTIVITIES THE SUBJECTS IN THIS RESEARCH WILL BE DOING (IF A SURVEY/QUESTIONNAIRE IS TO BE USED, STATE HOW MANY QUESTIONS WILL BE ASKED AND THE EXPECTED TIME TO COMPLETE THE SURVEY):</td>
<td>The survey is 23 questions and will take approximately 10 minutes to complete.</td>
<td></td>
</tr>
<tr>
<td>DESCRIBE SUBJECTS FOR THIS RESEARCH, INCLUDING A STATEMENT OF WHO WILL BE RECRUITED AND THE ANTICIPATED POPULATION SIZE:</td>
<td>The subjects will be Winthrop University current students that are 18 years and older who respond to the survey. The anticipated population size will be between 200-300 responses.</td>
<td></td>
</tr>
<tr>
<td>DO YOUR SUBJECTS INCLUDE ANY OF THE FOLLOWING:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes ☒ No</td>
<td>Infants and children younger than 7 years?</td>
<td></td>
</tr>
<tr>
<td>Yes ☒ No</td>
<td>Institutionalized mentally impaired people?</td>
<td></td>
</tr>
<tr>
<td>Yes ☒ No</td>
<td>Students enrolled in your own classes?</td>
<td></td>
</tr>
<tr>
<td>Yes ☒ No</td>
<td>Students enrolled at Winthrop University?</td>
<td></td>
</tr>
<tr>
<td>Yes ☒ No</td>
<td>Prisoners?</td>
<td></td>
</tr>
<tr>
<td>Yes ☒ No</td>
<td>Other special populations? Specify.</td>
<td></td>
</tr>
<tr>
<td>DESCRIBE HOW SUBJECTS WILL BE RECRUITED FOR THIS RESEARCH:</td>
<td>Students will be sent a survey through their student email addresses using Qualtrics. Surveys will also be handed to current club sports members during their practices. Those club sport members will be reminded that because they took the survey in paper form they do not need to take the survey again through Qualtrics.</td>
<td></td>
</tr>
<tr>
<td>HOW WILL YOU ASSURE THAT PARTICIPATION OF THE SUBJECTS IS VOLUNTARY?</td>
<td>In the written statement there will be a paragraph stating that the study is completely voluntary and can withdraw at any time.</td>
<td></td>
</tr>
<tr>
<td>CAN THE HUMAN SUBJECT BE DIRECTLY IDENTIFIED BY:</td>
<td>(For any responses of &quot;yes&quot; indicate in the space provided how the subject's privacy will be protected.)</td>
<td></td>
</tr>
<tr>
<td>Yes ☒ No</td>
<td>Name on Response form;</td>
<td></td>
</tr>
<tr>
<td>Yes ☒ No</td>
<td>Photograph;</td>
<td></td>
</tr>
<tr>
<td>Yes ☒ No</td>
<td>Television/VCR/DVD tapes;</td>
<td></td>
</tr>
<tr>
<td>Yes ☒ No</td>
<td>Audiotape;</td>
<td></td>
</tr>
<tr>
<td>Yes ☒ No</td>
<td>Coded Research Forms;</td>
<td></td>
</tr>
<tr>
<td>Yes ☒ No</td>
<td>Detailed Biographical Data;</td>
<td></td>
</tr>
<tr>
<td>Yes ☒ No</td>
<td>Informed Consent, Assent or Parental Permission forms;</td>
<td></td>
</tr>
<tr>
<td>Yes ☒ No</td>
<td>Other:</td>
<td></td>
</tr>
<tr>
<td>IF YOU CHECKED YES TO ANY ITEM IN 8a, THEN:</td>
<td>Yes ☒ No</td>
<td>Will personally identifiable data be shared with others outside of this</td>
</tr>
</tbody>
</table>
THE RESEARCHER SHALL MAKE EVERY POSSIBLE ATTEMPT TO MAINTAIN CONFIDENTIALITY OF THE RESEARCH AND THE HUMAN SUBJECTS. IF FOR SOME REASON, THE RESPONSES, INFORMATION, OR OBSERVATIONS OF THE SUBJECT BECOME KNOW TO PERSONS OTHER THAN THE RESEARCHER, COULD THIS INFORMATION POTENTIALLY PLACE THE SUBJECT AT RISK OF:

- [ ] Yes [ ] No  DAMAGE TO HIS/HER FINANCIAL STANDING?
- [ ] Yes [ ] No  DAMAGE TO HIS/HER PRESENT OR FUTURE EMPLOYABILITY?
- [ ] Yes [ ] No  CRIMINAL OR CIVIL LIABILITY?
- [ ] Yes [ ] No  PSYCHOLOGICAL/EMOTIONAL PROBLEMS?

EXPLAIN ANY "NO" ANSWERS AND STEPS THAT HAVE BEEN TAKEN TO MINIMIZE RISK:

ARE ANY OF THE TECHNIQUES LISTED BELOW INVOLVED IN THE RESEARCH?

- [ ] Yes [ ] No  INVASIVE MEDICAL PROCEDURES?
- [ ] Yes [ ] No  NON-INVASIVE MEDICAL PROCEDURES?
- [ ] Yes [ ] No  SYNCHRONOUS EXERCISE?
- [ ] Yes [ ] No  OTHER PHYSICAL TESTING

EXPLAIN ANY "NO" ANSWERS AND STEPS THAT HAVE BEEN TAKEN TO MINIMIZE RISK:

DESCRIBE HOW LEGALLY EFFECTIVE INFORMED CONSENT WILL BE OBTAINED AND ATTACH A COPY OF THE CONSENT FORM. IF MINORS ARE TO BE USED AS RESEARCH SUBJECTS, DESCRIBE PROCEDURES USED TO OBTAIN CONSENT OF THEIR PARENT(S), GUARDIAN(S), OR LEGAL REPRESENTATIVE(S). There will be a written statement at the beginning of the survey. This written statement describes what the study is about, how it is a voluntary study, how data will be kept, and it states the participant may choose to not participate with no penalties. At the beginning of the survey, there will be two filtering questions. The first question pertains to age. If they are below 18 years old, then the survey goes to the debriefing form. The second question asks if the person taking the survey is a current Winthrop student. If the person taking the survey is not a current student they will be directed towards the debriefing form.

**11b WAIVER OF SIGNED INFORMED CONSENT REQUIREMENT**

TO REQUEST A WAIVER OF A SIGNED INFORMED CONSENT, COMPLETE THE FOLLOWING:

- [ ] The only record linking the subject and the research would be the consent document, and the principal risk will be potential harm resulting from a breach of confidentiality. Each subject will be asked whether the subject wants documentation linking the subject with the research, and the subject's wishes will govern. Section 46.117(c)(1)

- [ ] The research presents no more than minimal risk of harm to the subjects, and involves no procedures, for which written consent is normally required outside of the research context. Section 46.117(c)(2)

- [ ] The research or demonstration project is to be conducted by or subject to the approval of state or local government officials and is designed to study, evaluate, or otherwise examine (i) public benefit or service programs; (ii) procedures for obtaining benefits or services under these programs; (iii) possible changes in or alternatives to these programs or procedures; or (iv) possible changes in methods or levels of payment for benefits or services under those programs; and the research could not practicably be carried out without the waiver or alteration. Section 46.116(c)

- [ ] The research involves no more than minimal risk to the subjects, the waiver will not adversely affect the rights and welfare of the subjects, the research could not practicably be carried out without the waiver, and whenever appropriate, the subjects
12. STORAGE AND DISPOSAL OF DATA AND OTHER RESEARCH MATERIALS:
   A. How and where will the data and other research material be stored until no longer
      needed? The data will be saved and stored into the researchers SPSS data file until it is no longer
      needed. All data will be de-identified

   B. When will the disposal of data and research materials take place? May 31st, 2019, or 3
      years after any publication or presentation of results.

   At a minimum, investigators must maintain research records for at least three (3) years after completion of the
   research. All records must be accessible for inspection and copying by authorized representatives of the IRB, any
   federal department or agency supporting the research, and sponsor, if any. (Source: 45CFR46.115) If the Principal
   Investigator is a student, then the faculty advisor will be responsible for the record retention. If you are a member of
   a professional association or society, you may be required by their practices to keep records longer than 3 years.

   C. How will data and research materials be disposed? All data and research materials will be
      shredded/erased.

13. INDICATE ON THE CHECK LIST BELOW, ANY DOCUMENTS THAT APPLY TO YOUR RESEARCH AND ATTACH TO
    THIS PROTOCOL A COPY OF THE APPLICABLE DOCUMENT:

   ☒ SURVEY INSTRUMENT AND/OR INTERVIEW QUESTIONNAIRE
   ☐ INFORMED CONSENT AGREEMENT
   ☐ PARENTAL OR GUARDIAN PERMISSION FOR A MINOR CHILD TO PARTICIPATE IN A RESEARCH STUDY
   ☐ ASSENT TO PARTICIPATE IN A RESEARCH STUDY (AGES 7-14 YEARS)
   ☐ ASSENT TO PARTICIPATE IN A RESEARCH STUDY (AGES 15 - 17 YEARS)
   ☐ COPIES OF ANY OTHER MAIL TO BE DELIVERED TO RESPONDENTS OR SUBJECTS (E.G. COVER LETTERS,
      SCRIPTS OF ORAL INSTRUCTIONS, ETC.

14. ☒ Yes ☐ No  DO YOU CONSIDER THIS RESEARCH EXEMPT FROM REVIEW BY THE HUMAN SUBJECTS
    COMMITTEE? IF YES, Please check the reason for exemption from the list below:

   a. ☐ Research conducted in established or commonly accepted educational settings, involving normal educational
      practices, such as (a) research on regular and special education instructional strategies; or (b) research on the
      effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods
      (45CFR46.101(b)(1))

   b. ☒ Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement) survey
      procedures, interview procedures or observation of public behavior, unless (a) information obtained is recorded in such a
      manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (b) any disclosure of
      the human subjects' responses outside the research could reasonably place the subject at risk of criminal or civil liability or
      be damaging to the subjects' financial standing, employability or reputation. (45CFR46.101(b)(2))

   c. ☐ Research involving children (subjects that have not attained the age of 18 years) is not exempt under this category
      unless the research involves only the observation of public behavior and the researchers do not participate or impact the
      activities being observed. (45CFR46.101(b)(3))

   d. ☐ Research involving the collection of data, documents, records, pathological specimens, if these sources
      are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be
      identified, directly or through identifiers linked to the subjects. (45CFR46.101(b)(4))
e. Research and demonstration projects which are conducted by or subject to the approval of a Federal department or agency heads, and which are designed to study, evaluate, or otherwise examine: (a) public benefit or service programs of Federal programs; (b) procedures for obtaining benefits or services under those Federal programs; (c) possible changes in methods or alternatives to those Federal programs or procedures; or (d) possible changes in methods or levels of payment for benefits or services under those Federal programs. [45 CFR 46(b)(5)]

f. Taste and food quality evaluation and consumer acceptance studies, (a) if wholesome foods without additives are consumed; or (b) if a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe, by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture. [45 CFR 46(b)(6)]

Certifications

By my signature below, I certify that each of the named co-researchers has accepted his/her role in this study. I agree to not begin any research activity on this study until written approval by the IRB has been received. I agree to a continuing exchange of information with the Institutional Review Board (IRB). I agree to obtain IRB approval before making any changes or additions to the project. I will provide progress reports at least annually, or as requested. I agree to report promptly to the IRB all unanticipated problems or serious adverse events involving risk to human subjects. A copy of the informed consent will be given to each subject and the signed original will be retained in my files, unless a waiver of a signed informed consent has been granted.

I further certify that I have successfully completed the following Human Subjects Training Course:

☐ CITI - Biomedical Research Investigator
☐ CITI - Social and Behavioral Research Investigator
☐ CITI - Undergraduate Researcher
☐ CITI - IRB Member

[Signature of Researcher] 2/11/16

Date

By my signature below, I certify that I have reviewed this research study and agree to counsel the student researcher in all aspects of the research study.

I further certify that I have successfully completed the following Human Subjects Training Course:

☐ CITI - Biomedical Research Investigator
☐ CITI - Social and Behavioral Research Investigator
☐ CITI - IRB Member

[Signature of Researcher: Signature of Faculty Advisor] 2/11/16

Date

Approval by Department Chair of Researcher of Record

[Date, if Chair is the Researcher or if Chair is otherwise unable to review]

I have reviewed this research study. I believe the research is sound, that the study design and methods are adequate to achieve the study goals, and that there are appropriate resources (financial and otherwise) available to the researcher. I support the study, and hereby submit it for further review by the IRB.

[Signature of Department Head or Dean] 2/11/16

Date

Note: Do not use personal home addresses and phone numbers on Informed Consent, Assent, Parental Permission or Debriefing statements.
A Relationship Study Comparing Satisfaction, Participation, and Commitment to Intramural and Club Sports with Students Retention Rates

Kevin Reynolds

Jinwook Chung, Ph.D.

February 22, 2016

14(b) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior unless (a) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; or (b) any disclosure of the human subjects’ responses outside the research could reasonably place the subject at risk of criminal or civil liability or be damaging to the subjects’ financial standing, employability or reputation. [45 CFR46(b)(2)]

Research involving children (subjects who have not attained the age of 18 years) is not exempt unless the research involves only the observation of public behavior and the researchers do not participate or impact the activities being observed. [45 CFR46.401(b)]

The Request for Review of Research Involving Human Subjects identified above has been reviewed by the Winthrop University Institutional Review Board (IRB) and has been determined to be exempt from IRB review. You may begin your research on or after the Exemption date shown above.

A Request for Modification of Previously Approved or Exempt Protocol must be completed by the researcher and submitted to the IRB for review for any proposed changes or modifications to the protocol. IRB approval must be received prior to amended changes or modifications being implemented by the researcher. These changes may include a change in a survey instrument, the addition or deletion of a research site, a change in personnel, a change in methodology or a change in the Researcher of Record.

Use the form Adverse Event Report to report any negative consequences that occur as a result of participation in a research project. An “adverse event” or “adverse experience” is an undesirable and unintended, though not necessarily unanticipated, injury or physical or emotional consequence to a human subject. “Unanticipated Problems” may or may not include specific events experienced by individual subjects, but are developments within the research activity that suggest a potential for increased risks to subjects or others.

Aaron Hartel, Ph.D., Chair
Winthrop University Institutional Review Board
803-323-4942
hartela@winthrop.edu
Deborah Broome
Sponsored Programs and Research
803-323-2398
broomer@winthrop.edu
Appendix B
Written Statement

A relationship study comparing satisfaction, participation, and commitment to Intramural and Club sports with student retention rates.

You are being invited to participate in a research study that is examining Intramural and Club sports participation, satisfaction and commitment levels.

If you choose to take part in this study, you will be asked to complete a survey that will take about 10-15 minutes. This study consists of a series of questions that are all answered online through survey monkey.

As a participant, you will not benefit directly from this study. Society will benefit by having a better understanding of college students’ recreational participation, satisfaction, and commitment levels. This information could help universities promote and fund programs that are perceived to encourage students to return to campus.

There are very few risks related to taking part in this study. The only known risk is potential discomfort in answering questions about your intramural and club sports participation, satisfaction and commitment levels. However, we expect this discomfort to be minimal, if present at all.

The information you provide will remain private. Information obtained through this study will only be used by the research staff. All data will be stored using locked computers with a password.

Please know that your participation in this study is voluntary. If you choose not to take part in the survey, there will be no penalty. You may quit the study at any time by closing out of the survey. You may also choose not to answer a question without penalty. If you choose not to participate after beginning the survey, the information that has been told to us will be kept private. Your choice to participate or not participate in this study will not reflect on you as a student of the University.

Your information will be used strictly for this research study only, will not be shared with anyone else, and you will not receive any spam emails related to participation in this study.

If you have any questions or concerns about this study, we encourage you to contact Kevin Reynolds, Principal Investigator at 803.323.4884; or Dr. Jinwook Chung, study mentor at 803.323.3376. You may also call the Office of Research Compliance at Winthrop University at 803.323.2460.

By choosing to continue, you agree to take part in the study.

Thank you for your interest in the study!

Kevin Reynolds
Appendix C
Debriefing Form

Debriefing Form
Thank you for participating in our "A relationship study comparing satisfaction, participation, and commitment to intramural and Club sports with student retention rates." study!

The purpose of this study is to examine how participation, satisfaction, & commitment level of intramural and club sports influence student’s intention of returning to campus. The level of participation can have a direct impact on the student’s intention of returning to campus as well as their commitment to the university. If a student shows higher levels of commitment then they are more likely to return to campus barring any outside and unforeseen circumstances. If students are less satisfied by intramural or club sports then they could be less likely to have a commitment towards those things and therefore have a lower likelihood of returning to campus. Your participation in this study will help determine the relationship between these variables.

If you are interested in learning the results of this study, please contact the researchers after April 25th 2016.

Researchers:
Kevin Reynolds
Reynoldsk2@winthrop.edu

If you have any concerns regarding this study, please contact the faculty advisor or the Director of Sponsored Programs and Research.

Faculty Advisor:
Dr. Chung
chungj@winthrop.edu

Sponsored Programs & Research:
Deborah Broome, Compliance Officer
(803) 323-2398
broomed@winthrop.edu

If anything about this survey caused you to feel uncomfortable, health and counseling services are available to you on the 2nd floor of Crawford. You can reach Counseling Services at (803) 323-2233 or get information at http://www.winthrop.edu/hcs/counselingservices-home.htm. All counseling services are free and confidential.
Appendix D
Instrument

A relationship study comparing satisfaction, participation, and commitment to Intramural and Club sports with student retention rates.
You are being invited to participate in a research study that is examining Intramural and Club sports participation, satisfaction and commitment levels.

If you choose to take part in this study, you will be asked to complete a survey that will take about 10-15 minutes. This study consists of a series of questions that are all answered online through survey monkey. As a participant, you will not benefit directly from this study. Society will benefit by having a better understanding of college students' recreational participation, satisfaction, and commitment levels. This information could help universities promote and fund programs that are perceived to encourage students to return to campus.

There are very few risks related to taking part in this study. The only known risk is potential discomfort in answering questions about your intramural and club sports participation, satisfaction and commitment levels. However, we expect this discomfort to be minimal, if present at all.

The information you provide will remain private. Information obtained through this study will only be used by the research staff. All data will be stored using locked computers with a password.

Please know that your participation in this study is voluntary. If you choose not to take part in the survey, there will be no penalty. You may quit the study at any time by closing out of the survey. You may also choose not to answer a question without penalty. If you choose not to participate after beginning the survey, the information that has been told to us will be kept private. Your choice to participate or not participate in this study will not reflect on you as a student of the University.

Your information will be used strictly for this research study only, will not be shared with anyone else, and you will not receive any spam emails related to participation in this study.

If you have any questions or concerns about this study, we encourage you to contact Kevin Reynolds, Principal Investigator at 803.323.4864; or Dr. Jinwook Chung, study mentor at 803.323.3376. You may also call the Office of Research Compliance at Winthrop University at 803.323.2460.

By choosing to continue, you agree to take part in the study.

Thank you for your interest in the study!

Kevin Reynolds

- I agree to participate in the study
- I do not agree to participate in the study

(If you do not agree, skip to Debriefing Form)
1. Are you over 18 years of age?
   - Yes
   - No

2. Are you a current University Student?
   - Yes
   - No

3. What gender do you identify yourself with?
   - Male
   - Female

4. What class are you classified by hours completed?
   - Freshman
   - Sophomore
   - Junior
   - Senior
   - Graduate Student
Intramural Sports

5. How many hours per week do you participate in intramural sports? (If 0 then skip to question #12)
   - 0
   - 1
   - 2
   - 3
   - 4
   - 5+

6. I feel a commitment to continue a relationship with intramural sports
   - Strongly Disagree
   - Moderately Disagree
   - Neither Agree nor Disagree
   - Moderately Agree
   - Strongly Agree

7. I would expend extra hours per week to continue participating in intramural sports.
   - Strongly Disagree
   - Moderately Disagree
   - Neither Agree nor Disagree
   - Moderately Agree
   - Strongly Agree

8. I would continue to participate in intramural sports even if the registration fee was increased somewhat.
   - Strongly Disagree
   - Moderately Disagree
   - Neither Agree nor Disagree
   - Moderately Agree
   - Strongly Agree

9. On the whole, I am satisfied with my experience with intramural sports.
   - Strongly Disagree
   - Moderately Disagree
   - Neither Agree nor Disagree
   - Moderately Agree
   - Strongly Agree

10. Overall, my negative experience outweighs my positive experience with intramural sports.
    - Strongly Disagree
    - Moderately Disagree
    - Neither Agree nor Disagree
    - Moderately Agree
    - Strongly Agree

11. In general, I am happy with intramural sports.
    - Strongly Disagree
    - Moderately Disagree
    - Neither Agree nor Disagree
    - Moderately Agree
    - Strongly Agree
Club Sports

12. How many hours per week do you participate in club sports? (If 0 then skip to question #19)
   - 0
   - 1
   - 2
   - 3
   - 4
   - 5+

13. I feel a commitment to continue a relationship with club sports
   - Strongly Disagree
   - Moderately Disagree
   - Neither Agree nor Disagree
   - Moderately Agree
   - Strongly Agree

14. I would expend extra hours per week to continue participating in club sports.
   - Strongly Disagree
   - Moderately Disagree
   - Neither Agree nor Disagree
   - Moderately Agree
   - Strongly Agree

15. I would continue to participate in club sports even if the dues were increased somewhat.
   - Strongly Disagree
   - Moderately Disagree
   - Neither Agree nor Disagree
   - Moderately Agree
   - Strongly Agree

16. On the whole, I am satisfied with my experience with club sports.
   - Strongly Disagree
   - Moderately Disagree
   - Neither Agree nor Disagree
   - Moderately Agree
   - Strongly Agree

17. Overall, my negative experience outweighs my positive experience with club sports.
   - Strongly Disagree
   - Moderately Disagree
   - Neither Agree nor Disagree
   - Moderately Agree
   - Strongly Agree

18. In general, I am happy with club sports.
   - Strongly Disagree
   - Moderately Disagree
   - Neither Agree nor Disagree
   - Moderately Agree
   - Strongly Agree
Intention to Return

19. The probability that I will return to campus next semester is
   - Very Unlikely
   - Somewhat Unlikely
   - Unsure
   - Somewhat Likely
   - Very Likely

20. The likelihood that I would recommend my university to a friend is
   - Very Unlikely
   - Somewhat Unlikely
   - Unsure
   - Somewhat Likely
   - Very Likely

21. If I had to choose a university over again, I would make the same choice
   - Very Unlikely
   - Somewhat Unlikely
   - Unsure
   - Somewhat Likely
   - Very Likely
Debriefing Form

Thank you for participating in our "A relationship study comparing satisfaction, participation, and commitment to Intramural and Club sports with student retention rates" study!

The purpose of this study is to examine how participation, satisfaction, & commitment level of intramural and club sports influence student's intention of returning to campus. The level of participation can have a direct impact on the student's intention of returning to campus as well as their commitment to the university. If a student shows higher levels of commitment then they are more likely to return to campus barring any outside and unforeseen circumstances. If students are less satisfied by intramural or club sports then they could be less likely to have a commitment towards those things and therefore have a lower likelihood of returning to campus. Your participation in this study will help determine the relationship between these variables.

If you are interested in learning the results of this study, please contact the researchers after April 25th 2016.

Researchers:
Kevin Reynolds
Reynolds22@winternet.edu

If you have any concerns regarding this study, please contact the faculty advisor or the Director of Sponsored Programs and Research.

Faculty Advisor: Sponsored Programs & Research:
Dr. Chung
Drung@winternet.edu
Deborah Brocme, Compliance Officer
(803) 323-2598
brocmed@winternet.edu

If anything about this survey caused you to feel uncomfortable, health and counseling services are available to you on the 2nd floor of Crawford. You can reach Counseling Services at (803) 323-2233 or get information at http://www.winternet.edu/hs/counselingservices-bome.htm.
All counseling services are free and confidential.
## Appendix E

### Table 1. Demographics

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
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</thead>
<tbody>
<tr>
<td>Male</td>
<td>47</td>
<td>57.3</td>
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<tr>
<td>Female</td>
<td>35</td>
<td>42.7</td>
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<tr>
<td>Total</td>
<td>82</td>
<td>100.0</td>
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### Table 2. Classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Frequency</th>
<th>Percent</th>
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<tbody>
<tr>
<td>Freshman</td>
<td>11</td>
<td>13.4</td>
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<tr>
<td>Sophomore</td>
<td>14</td>
<td>17.1</td>
</tr>
<tr>
<td>Junior</td>
<td>27</td>
<td>32.9</td>
</tr>
<tr>
<td>Senior</td>
<td>19</td>
<td>23.2</td>
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<tr>
<td>Graduate</td>
<td>11</td>
<td>13.4</td>
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<tr>
<td>TOTAL</td>
<td>82</td>
<td>100.0</td>
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</table>

### Table 3. Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Frequency</th>
<th>Percent</th>
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<tbody>
<tr>
<td>1 (Intramural only)</td>
<td>39</td>
<td>47.6</td>
</tr>
<tr>
<td>2 (Club sports only)</td>
<td>17</td>
<td>20.7</td>
</tr>
<tr>
<td>3 (Intramural and Clubs)</td>
<td>26</td>
<td>31.7</td>
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<tr>
<td>TOTAL</td>
<td>82</td>
<td>100.0</td>
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Table 4. Table for Descriptive Statistics

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<thead>
<tr>
<th>Source</th>
<th>Mean</th>
<th>Std. Deviation</th>
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<tbody>
<tr>
<td>Intramural Participation</td>
<td>3.37</td>
<td>1.23</td>
</tr>
<tr>
<td>Intramural Commitment</td>
<td>10.81</td>
<td>2.80</td>
</tr>
<tr>
<td>Intramural Satisfaction</td>
<td>12.28</td>
<td>2.44</td>
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<tr>
<td>Club Sports Participation</td>
<td>4.56</td>
<td>1.01</td>
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<tr>
<td>Club Sports Commitment</td>
<td>12.21</td>
<td>2.23</td>
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<tr>
<td>Club Sports Satisfaction</td>
<td>12.51</td>
<td>2.25</td>
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</table>
### Table 5. Testing of the Hypotheses

<table>
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<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intramural Participation</td>
<td>1</td>
<td>22.338</td>
<td>3.474</td>
<td>.067</td>
<td>.052</td>
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<tr>
<td>Intramural Commitment</td>
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<td>29.231</td>
<td>4.625</td>
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<td>.068</td>
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<td>Intramural Satisfaction</td>
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<td>6.703</td>
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<tr>
<td>Club Sports Participation</td>
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<td>6.593</td>
<td>2.029</td>
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<td>.047</td>
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<tr>
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<td>18.729</td>
<td>6.339</td>
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<td>.134</td>
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<tr>
<td>Club Sports Satisfaction</td>
<td>1</td>
<td>18.238</td>
<td>6.148</td>
<td>.017</td>
<td>.130</td>
</tr>
</tbody>
</table>
Figure 1. Intention to Return for Level of Intramural Participation

Intention to Return

Low Intramural Participation Level

High Intramural Participation Level
Figure 2. Intention to Return for Level of Commitment in Intramural Sports
Figure 3. Intention to Return for Level of Satisfaction in Intramural Sports
Figure 4. Intention to Return for Level of Participation in Club Sports

Intention to Return

Low

High

Club Sports Participation Level
Figure 5. Intention to Return for Level of Commitment in Club Sports

Intention to Return

Low          High

Club Sports Commitment Level
Figure 6. Intention to Return for Level of Satisfaction in Club Sports

Intention to Return for Club Sports Satisfaction Level

Intention to Return

Low

High

Club Sports Satisfaction Level
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