EXAMINING LEADERSHIP DEVELOPMENT IN CAMPUS RECREATION STUDENT EMPLOYMENT USING THE STUDENT LEADERSHIP PRACTICES INVENTORY: PRETEST-POSTTEST DESIGN ON INTRAMURAL SPORTS BASKETBALL OFFICIALS

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Abstract: The purpose of this study was to take a quantitative look at how leadership develops in campus recreation student employees by examining Oklahoma State Intramural Sports Basketball Officials. Using the Student Leadership Practices Inventory (S-LPI) created by Kouzes and Posner (2006), this research aimed to expand on the research regarding knowledge of student development through recreation employees, focusing on leadership behavior. This study also aimed to understand the differences of leadership development based on previous experience as an intramural sports official. 40 intramural basketball officials were chosen to participate in the study, 20 new and 20 returning. Each official took the S-LPI before the season started to measure their leadership behavior, then again after the season ended. Three officials did not complete the season and could not take the posttest. The results showed a significant increase of the overall leadership score from pretest to posttest. In addition, the S-LPI contains five leadership practices that exemplary leaders demonstrate: Model the Way, Inspired a Shared Vision, Challenge the Process, Enabling Others to Act, and Encouraging the Heart. Each leadership domain also showed significant increase from pretest to posttest. Lastly, returning and new officials showed no significant differences in leadership behavior. Overall, the results show that working as an intramural sports basketball official develops leadership, further establishing campus recreation as an essential structure in higher education. Future research could examine other types of campus recreation student employees, along with using the S-LPI as a tool for assessment.
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CHAPTER 1

INTRODUCTION

Introduction

Campus recreational professionals are continuously having to justify their role in higher education to keep financial backing from their universities. When budgets tighten, often funds supporting campus recreation are the first to be cut. Fortunately, over the past 20 years, research in the recreational sports field has been focused on establishing recreational programs as an essential structure for student involvement and co-curricular learning experiences for participants (Belch, Gebel & Mass, 2001; Hackett, 2007; Todaro, 1993; Collins et al; 2001; Hall, 2006; Haines, 2001). Researchers have been successful in showing a variety of beneficial outcomes for students, giving university officials many reasons to continue funding these programs and facilities. While these studies have found many positive outcomes associated with participation, there are limited studies on the effect campus recreation has on the student employees in the field. Recreational sports administrative units rely heavily on student employees to operate their programs and facilities (Bower, Hums, & Keedy, 2005). Common employment opportunities include lifeguards, intramural supervisors, fitness leaders, outdoor adventure guides, member service representatives, facility managers and intramural officials (Chelladurai, 2006). Students are staffing these programs, therefore it is important to understand what positive effects, if any, students can expect.
Student staff members come from a variety of educational majors, many of which are not directly connected to the areas of responsibility or work experiences held by these student employees. Thus, one of the main employment goals for campus recreation may be to provide students with transferrable skills that they can use in their respective careers or work. Leadership is an essential skill that is important for almost every career that a university graduate might strive to achieve. Moreover, educating and developing students as leaders has long been a central purpose of higher education institutions as evidenced by university’s mission statements (Astin & Astin, 2000). Leadership, like any other skill needs to be learned and then practiced, (Komives, Lucas, & McMahon, 1998). As one of the largest employers of students in higher education, recreational sports provides a logical setting for fostering student development, including the mastering of leadership skills (Bryant & Bradley, 1993).

In order to further establish legitimacy of their programs, campus recreation professionals must be able to prove that their goals and outcomes align with the home university’s mission. As student development is a common university mission, campus recreational professional need to provide evidence that campus recreation can aid in this mission. More research is needed to understand how employment in campus recreation aids student development, and more specifically, how working in campus recreation can help students develop their leadership skills.

**Statement of the Problem**

Campus recreation relies heavily on student workers, yet employment research within this field is limited. Professionals often have to justify their existence in higher
education using research related to the participation rates and frequency from the student body; however a majority of the funds appropriated to these campus recreation programs go to paying the student employees. More research is needed to see if the benefits participants receive, extend to student workers as well. Developing students to become leaders is often a mission of universities and although there is evidence that links participation in recreational sports to a variety of leadership skills (Astin, 1993; Bryant, Banta, & Bradley, 1995; Downs, 2003; Haines, 2001), there is limited research on how recreation employees develop this skill over time. If campus recreation professionals are able to say they can be an additional resource in higher education that helps students develop leadership, their legitimacy will increase because this outcome often contributes to the home university’s mission as well.

The Student Leadership Practices Inventory is a leadership development instrument targeted for college students. The framework consists of five leadership practices: modeling the way, inspiring a shared vision, challenging the process, enabling others to act, and encouraging the heart (Kouzes & Posner, 2003). Using the Student Leadership Practices Inventory, this research will look deeper into how working in campus recreation, specifically as an intramural sports basketball official, affects student leadership behavior over time.

**Purpose of the Study**

The purpose of this study is to take a quantitative approach to examine how leadership develops in campus recreation employees, using intramural basketball officials as the sample subjects. Using a pretest-posttest design, this study will expand on the
limited body regarding knowledge of student development through recreation employees, focusing on leadership behavior. This study also aims to understand the differences of leadership development based on previous experience as an intramural sports official.

**Hypotheses**

In this study, the primary hypothesis is that there is a significant increase in leadership behavior for each of the five leadership practices among Intramural Sports basketball officials from beginning of the season to the end of that season. Using a pretest-posttest, convenience sample, and experimental design, officials will identify how often they perform specific behaviors and actions described (Kouzes & Posner, 2013). This hypothesis will be tested as:

*Null Hypothesis*: There is no significant difference in leadership behaviors as measured by the Student Leadership Practices Inventory among Intramural Sports basketball officials from the beginning of a recreational sport season to the end of that season.

*Alternative Hypothesis*: There is a significant difference as measured by the Student Leadership Practices Inventory among Intramural Sports basketball officials from the beginning of a recreational sport season to the end of that season.

The second hypothesis for this study is that there are significant differences between the leadership behavior frequencies based on previous work experience among intramural sports basketball officials from the beginning of a recreational sport season to the end of that season.
**Null Hypothesis:** There is no significant difference in leadership behavior as measured by the Student Leadership Practices Inventory based on previous work experience among intramural sports basketball officials from the beginning of a recreational sport season to the end of that season.

**Alternative Hypothesis:** There is a significant difference in one or more of the domains measured by the Student Leadership Practices Inventory based on previous work experience, among intramural sports basketball officials from the beginning of a recreational sport season to the end of that season.

**Significance of Study**

The information gained in this research study will potentially help recreational professionals justify campus recreation programs to university administrators because of leadership benefits to the student employees, not just student participation benefits. While research that determines the benefits of campus recreation for participants is important, understanding the benefits to recreation employees is just as essential to defending campus recreation because the majority of the funding goes to paying these employees. Moreover, it is crucial to understand what outcomes recreation employees can anticipate because student employees often put a significant amount of time and effort into these types of co-curricular jobs, resulting in time taken away from academics. If there are no benefits besides monetary means, it will be difficult to justify having many student employees.

This study is also important because it aims to uncover the connection between Astin’s Theory of Involvement and campus recreation employment, a topic with limited
studies. This theory proclaims that the amount of personal development and learning that a student undergoes is proportional to the quality and quantity of the involvement (Astin, 1984). In Astin’s (1993) research on the impact of clubs and organizations on students, he found that leadership abilities and interpersonal skills were more likely to improve with more hours spent in the organizations. He also suggests that working part time on campus has a positive effect on grade point average, cognitive growth, and faster degree completion. This study will help to see if Astin’s theory of involvement can be applied to student recreation employees, and if campus recreation employment is a setting that students can develop skills, specifically leadership.

Lastly, this research study is significant in the world of higher education because higher education has been continuously challenged with helping students develop special talents and attitudes that will make them leaders during and after college (Astin & Astin, 2000). However, students will find it difficult to lead until they have themselves experienced leadership opportunities as part of their education (Astin & Astin, 2000). Classroom education continues to emphasize knowledge, the development of writing, critical thinking, but gives little attention to the qualities that make an effective leader, like honesty, integrity, empathy, ability to work in a team, and listening skills (Astin & Astin, 2000). This is where campus recreation employment can play a role in helping students learn these skills that academics cannot teach. Further, this information can be used as a starting point for recreation professionals to enhance the student employment experience to further refine these leadership skills. For example, if the student employees report gains in the student leadership practice “Modeling the Way,” perhaps trainings with the employees to discuss these experiences regarding Modeling the Way could
enhance the leadership learning benefits for all of the student employees. Overall, information gained from this study, will give important insight into campus recreation’s role in developing students as leaders.

**Definition of Terms**

*Campus Recreation:* “Modern campus recreation recreational sports program integrate diverse activities and offerings into the curricular and co-curricular fabric of the institution in order to provide opportunities for social integration, healthy behaviors and fun” (NIRSA, 2013, p.2). Departments usually include intramural sports, sport clubs, outdoor adventure, informal recreation, wellness, and adaptive programs. Most campus recreation departments operate a student recreation facility that include gymnasiums, weight rooms, swimming pools, offices, and group fitness rooms (NIRSA, 2013).

*Intramural Sports:* Intramural literally means “within the walls” (Mitchell, 1929, p.1), as Intramural Sports programs provide various competitive and noncompetitive leagues and tournaments for students, faculty and staff who come from the within the university (NIRSA, 2013). They are a part of Campus Recreation Departments, sometimes falling under The Department of Student Affairs, and are often funded by student fees.

*Student Leadership Practices Inventory, Student LPI or S-LPI:* Instrument used in the study. The questionnaire identifies thirty leadership behaviors and actions that fall under five categories, Modeling the Way, Inspiring a Shared Vision, Challenging the Process, Enabling Others to Act and Encouraging the Heart. The Student LPI
is measured using a five-point Likert scale with 1 representing rarely and 5 representing very frequently.

Model the Way: One of the five leadership practices from the Student LPI. Defined as “finding your voice by clarifying your personal values” and “setting the example by aligning actions with shared values” (Kouzes & Posner, 2006, p.11).

Inspired a Shared Vision: One of the five leadership practices from the Student LPI. Defined as “envisioning the future by imaging exciting and ennobling possibilities” and “enlisting others in a common vision by appealing to share aspirations” (Kouzes & Posner, 2006, p.13).

Challenge the Process: One of the five leadership practices from the Student LPI. Defined as “searching for opportunities by seeking innovative ways to change, grow, and improve” and “experimenting and taking risks by constantly generating small wins and learning from mistakes” (Kouzes & Posner, 2006, p.14).

Enable Others to Act: One of the five leadership practices from the Student LPI. Defined as “fostering collaboration by promoting cooperative goals and building trust” and strengthening others by sharing power and discretion” (Kouzes & Posner, 2006, p.15).

Encourage the Heart: One of the five leadership practices from the Student LPI. Defined as “recognizing contributions by showing appreciation for individual excellence” and “celebrating the values and victories by creating a spirit of community” (Kouzes & Posner, 2006, p. 16).
Intramural Basketball Official: Intramural Sports employees who officiate intramural basketball games. They are either Oklahoma State University students or Northern Oklahoma College Gateway students.

Leadership: Defined in terms of the five leadership practices: Model the Way, Inspired a Shared Vision, Challenge the Process, Enable Others to Act, and Encourage the Heart. Leaders

Leadership Behavior: Defined as the thirty behavior statements in the Student Leadership Practices Inventory. Leadership behavior is said to have developed if there is significant increase in the five leadership practices.

Assumptions and Limitations of the Study

This study assumes that the officials participating in the study would voluntary agree to take the Leadership Practices Inventory at the start and end of the season. It assumes that these officials do not feel obligated to participate in the study in order to keep their job and in no way affects their standing in the program. It also assumes that officiating basketball is their primary campus recreation job.

Potential limitations of the study include the following:

1. Having a high attrition rate. Only officials who complete the season and work at least two shifts a week can be included in the study. As a result, anyone who is cut, drops out or is not available to take the posttest will not be included, which could reduce the amount of participants.
2. Having a limited sample. Since the amount of surveys that can be purchased is limited, only 40 officials will be invited to partake in the study. This will reduce the amount of confidence one can have in the results.

3. Using results from only Intramural Sports Basketball officials may limit the generalizability to all types of campus recreation employment jobs. Basketball officials were chosen as the participants because of the large amount available and the ease in which it would be to survey them.

4. This study will only survey officials at Oklahoma State University, which limits generalizability of findings to other universities.

5. Since officials will be taking the pre-test questionnaire prior to their first shift, their responses may be skewed more positively than reality in order to make a favorable impression. As the researcher for this study and one of the graduate assistants in charge of the basketball officials, participants may answer the questions thinking a potential supervisor will be analyzing the results, instead of just a researcher. This could add bias to their responses.

6. As with any pre-post design study where time is a factor, there is the possibility of other events confounding the effect of the dependent variable. For example, Intramural Sports Basketball officials may have other jobs or positions that affect their leadership behaviors. Any changes from pretest to posttest may not be direct result from officiating Intramural Basketball. This study does not control for other leadership opportunities that can affect their leadership behavior.
7. This study assessed leadership development over one five week season, however many leadership behaviors do not follow a linear growth and may need a longer time to develop (Ployhart, Holtz, & Bliese 2002).
CHAPTER II

REVIEW OF LITERATURE

Introduction

This review of the literature will expand on the research topics of campus recreation effects on participants and student workers in the field. It will also look at leadership theory, Astin’s theory of involvement, and student development theory to see how this relates to student employment in recreational sports. Lastly, the background and instrumentation of the Student Leadership Practices Inventory will be explored, along with related studies that have used this instrument. These topics will provide an overview on the past research in campus recreation, leadership, and student involvement to show how working in recreational sports can be the perfect setting for students to develop as leaders. Demonstrating this will provide the reasoning for conducting this study.

Campus Recreation Participation

Over the past twenty years, research within the campus recreation field has increased immensely. These studies have shown that recreational sports contribute to a student’s academic success, personal development, and college experience (Light, 1990; Belch, Gebel & Mass, 2001; Todaro, 1993; Collins et al; 2001; Hall, 2006; Haines, 2001). Belch, Gebel, and Maas (2001) focused on freshman use of the recreation facility.
Their results suggested that freshman who went to the recreation center more often had higher grades and higher credited hours. This finding was particularly interesting because those who used the facility less; actually entered college with higher SAT/ACT scores and GPA’s than active facility users. Participation has more positive effects on students than just academic success. Research has shown that campus recreation helps with stress reduction, overall happiness, well-being, creating a sense of accomplishment, weight control, and self confidence (Kerr-Downs Research, 2003; NIRSA, 2003).

Recreational sports on campus can also benefit the home university by increasing student college satisfaction, which in turn increases retention rates. For example, in a qualitative study to understand campus recreation programs effect on retaining students, Hall (2006) found that through participation, people felt a part of the university community, while also developing friendships and a social life. These positive experiences effected their decision to continue at the college (Hall, 2006). These claims were substantiated through a quantitative study by Moffitt (2010). In her research, she found that users of campus recreation programs and facilities had a higher college satisfaction than non-users and had a higher likelihood of completing their degree (Moffitt, 2010). Lindsay and Sessoms (2006) conducted a similar study and found that for juniors and seniors, the availability of a recreational sports facility and programs impacted their decision to attend and remain at the university. Proving that campus recreation has these participation benefits is crucial, but this study aims to see if certain positive outcomes can be extended to the student worker as well.
Campus Recreation Employment

Past research in the area of student employment has not typically focused on a specific type of employment field like campus recreation. Instead, research has been centered on how students working any campus job affect the student and the university (Hall, 2013). These studies have shown that student employment can aid in development (Furr & Elling, 2000; Pascarella et al., 1998), increase academic performance (Bradley, 2006; Canabal, 1998; Pike, Kuh & Massa-McKinley, 2008), and help increase student engagement with their university (Moore & Rago, 2009; McCormick, Moore & Kuh, 2010). Moreover, working an on-campus job has been found to be beneficial in securing a job after graduation. Brooks (2006) found that working throughout college was an effective way to stand out amongst other graduates. Simply earning a degree may no longer be sufficient to gain entry into a professional career. Employers are now placing a stronger emphasis on work-related skills and experiences outside of the academic curriculum (Brown 2007).

Several studies have narrowed their focus to campus recreation student employment. Hackett (2007) examined the relationship between recreational sports employment and academic success. After comparing GPAs of undergraduate employees against a random sample of students not employed, he found mixed results, but freshman and junior employees had a significantly higher GPA than the general student population (Hackett, 2007). Researcher Schuh (1999) conducted a qualitative study on how intramural officials evaluated their experience. His results showed that officials developed a variety of skills from communication, self confidence, self control, and leadership. Several officials quoted saying that after officiating for a season, they found
themselves taking on leadership roles in group projects for their major. Another exploratory study looked at student learning outcomes from working in campus recreation (Carr, 2005). This study found that students experienced some personal growth and developed skills they could take into other work environments (Carr, 2005). Lastly, Hall, Forrester, and Borsz (2008) interviewed 21 students who held a variety of campus recreational leadership roles to explore the effects these positions had on them. Several themes came out of these interviews including mentoring and motivating others, problem solving and decision making, and working with a diverse group of people. These studies underscore the need to look deeper into student development for campus recreation employees, but from a quantitative perspective.

Student employment within campus recreation is intended to provide a setting that is team-oriented, participatory, and conducive to learning. The experience gained will help students develop skills and knowledge critical in any workplace, such as time management, communication, customer service and leadership. With students coming from a variety of educational backgrounds, one of the main employment goals is to help students cultivate skills that they can use in their future workplace or academic endeavors (Hackett, 2007) There are a variety of positions held by student employees including lifeguards, supervisors, fitness leaders, outdoor adventure guides, member service representatives, facility managers and intramural officials (Chelladurai, 2006). The focus of this study will be the intramural official. Quick (1982) argues that officiating is one of the programs that can have significant potential for student development. The success of an intramural program is very dependent on quality officiating. Officials have to be prepared to make quick decisions and for unexpected challenges.
As one of the largest on-campus employment opportunities for students, campus recreation gives student employees the opportunity for leadership development because of the extensive interaction with others these jobs require. Astin and Astin (2000) assert that leadership development is based on collaboration, a shared purpose and is sustained through daily interactions with other people. Any recreational employment job, and especially intramural sports officiating, fits this description because officials must work as a team in order to control the game and enforce the sport specific rules. They also must interact with a wide group of people, as Intramural Sports participants represent all types of students.

**Theory of Involvement**

This study will explore Theory of Involvement as it relates to campus recreation employment. Astin’s Theory of Involvement (1984) asserts that the amount of student learning and development expected is proportional to the quality and quantity invested by the student in their college experience. Involvement is characterized as academic, co-curricular or interactions with faculty. Generally, the greater amount of involvement the student has, the more the student will learn and personally develop, but there is a limit. Too much involvement can produce undesirable results and be counterproductive. The theory also proclaims that the student’s motivation and amount of time and energy devoted to the learning process are far more important to the amount of development than the techniques, course content or resources of the program. The focus needs to be on the student’s behavior and actions more than the instructor’s techniques and content (Astin, 1984). Working in campus recreation fits the criteria for Astin’s involvement because it gives students the opportunity to interact with university staff, coworkers, or participants.
Campus recreation student employees must devote a great deal of time and energy into these jobs, increasing the chances that they will develop and learn. Additionally, Astin’s theory focuses on the behavior of the student, which is relevant to this study because leadership behavior is the variable being measured.

**Student Development Theory**

Chickering’s Student Development Theory suggests seven vectors of development that college students face: Achieving Competence, Managing Emotions, Becoming Autonomous, Establishing Identity, Freeing Interpersonal Relationships, Clarifying Purposes, and Developing Integrity. These vectors will help guide this study in understanding the development stages the population studied is going through. Moreover, how developing leadership fits in with these seven vectors will be discussed. The vectors are:

**Achieving Competence:** This vector is accomplished through gaining intellectual, physical, manual, and interpersonal competence. Intellectual competence in college is emphasized with educational objectives and is the easiest of three competences to measure. Students not only acquire more information, they improve their mental ability. Physical and manual competence refers to students spending time in athletic and artistic activities that develop manual and physical skill that may become a future vocational career, or a source of satisfaction, like a sport. Athletics can help students manage their emotions better because unlike in many classroom settings, “Rage and delight are expected reactions; their expression in voice, gesture and action are part of the game” (Chickering, 1969, p.29). Interpersonal competence can be found in every interaction, as
every conversation has an intended effect and accomplishing that effect can be a measure of competence. Interpersonal competence consists of communicating, listening, and learning to respond to another person appropriately (Chickering, 1969).

**Managing Emotions:** Every college student experiences times of negative emotions such as depression, anger, fear, anxiety and these can derail one’s educational goals. This vector does not aim to eliminate emotions, but rather intends for student to be aware of what triggers such emotions and for them to find the appropriate channels to release them. Some students enter college with no filter of emotions, and they have a bigger task of developing flexible controls. Positive emotions do not need to be managed as much as negative ones; rather, students should be aware of those emotions and allow them to come out (Chickering, 1969)

**Developing Autonomy:** This vector has three components: The development of emotional independence, the development of instrumental independence and the recognition of interdependence. Being emotionally independent means not needing reassurance or approval. It starts with the separation from the parents and then shifts to support from peers. Eventually, it is hoped, the student is secure enough with his or herself to not worry about their status among their friends and can pursue her or her own goals. Instrumental independence consists of being self-sufficient and mobile. Students must be resourceful and carry out activities independently. Mobile students are able to leave an undesirable situation for a better one. Lastly, recognition of interdependence means recognizing that life does not occur in a vacuum and that while autonomy is healthy, interpersonal relationships are crucial to development (Chickering, 1969).
**Establishing Identity:** Establishing identity involves an accumulation of all the vectors. But more than that, “development of identity involves clarification of conceptions concerning physical needs, characteristics, and personal appearance, and clarification of sexual identification, of sexual appropriate roles and behavior” (Chickering, 1969, p.14). It involves seeing oneself within a historical, social, and ethnic context and understanding how one is viewed by others. Lastly, it involves finding a role or style that is a genuine expression of one’s self. Establishing a solid sense of identity is key to developing all the other vectors (Chickering, 1969).

**Freeing Interpersonal Relationships:** This vector consists of students developing tolerance for a wide variety of people. This change is fostered not from putting up with diversity, but from increased capacity to respond to people as individuals and not stereotypes. Relationships also become healthier because they start to be based on honesty and unconditional regard. These types of relationship last longer and can endure more conflicts because they are more accepting of flaws and more appreciative of assets (Chickering, 1969).

**Developing Purpose:** Students often get to college without knowing what career path they want to pursue. Soon, students realize what vocation they desire by discovering what excites and fulfills them, along with what utilizes their talents and abilities. Developing purpose also entails the ability to align one’s everyday goals with a broader and more meaningful purpose. This overall purpose ideally guides the student on a daily basis. Balancing lifestyle decisions such as marriage with career aspirations and recreational interests is often difficult for students as they develop their purpose (Chickering, 1969).
**Developing Integrity:** This involves developing a set of beliefs that assist in guiding one’s behavior. Integrity means there is a consistency between one’s behavior and beliefs. Developing integrity has three stages, 1) humanizing values, 2) personalizing values and 3) developing congruence. Humanizing values refers to a student’s understanding of the connection between rules and the purpose of those rules. Rules lose their rigidness and become more relative and situational. Personalizing values is when behaviors align with one’s beliefs and there is less internal debate on how to act in certain situations. When integrity is highly developed, the student can make decisions more decisively because they know what values they hold and can act in accordance with them (Chickering, 1969).

**Connection to Study:** College students are going through many development changes and working in campus recreation gives students opportunities to develop many of these vectors. For example, achieving interpersonal competence is developed through working with co-workers, participants, and supervisors. Moreover, officials often have their integrity tested because they must make many quick decisions; if their personal values are not well established, it will be very difficult to make decisions with confidence. Students are constantly developing throughout their years in college, and developing leadership through working in campus recreation relates to these vectors. As students develop purpose, establish identity, gain integrity, become autonomous, manage emotions, achieve competence, and create interpersonal relationships, it can be assumed that their leadership behavior will increase as well.
Leadership Theory

Leadership has been debated for decades, with scholars only agreeing that there is no one set definition. This section will describe the related theories of leadership and which one is most appropriate for this study.

The Trait Approach to Leadership: This approach to leadership focuses on the characteristic or traits of leaders and that these traits produce behavior that is consistent across many situations. People are either born with these traits or not, and they remain stable over time. Most of the early research based on this theory examined the trait differences between leaders and followers. It was assumed that people in higher positions would have more leadership traits than those in lower (positions). Researchers found though that only a couple traits separated leaders and non-leaders. This approach to leadership does not put enough emphasis on the growth of leadership and how situational variables affect leadership as well (Fleenor, 2006). As a result, it will not be used as a framework for this study.

Transformational Leadership: Transformational leaders gain influence by demonstrating confidence, articulating goals, and having strong convictions in one’s own beliefs. They are able to unite followers and motivate them to bring out levels of strong performances that were previously thought as unattainable. They seek innovative ways of working, are not deterred by risks, and are constantly looking to change the status quo. Transformational leaders have the ability to make followers look past their personal interest and to support the mission of the organization (Bass, 1985). Bass’s concept of the transformational leader expanded on House’s (1977) charismatic leadership theory.
Charismatic leadership is similar to transformational leadership in that it emphasizes leaders’ personal abilities, which have a profound effect on followers to accomplish amazing feats, but House sees followers as dependent on the leader, whereas Bass characterizes followers as independent and acting with free choice.

**Transactional Leadership:** This approach to leadership views leaders as acting within the scope of the existing process and people who tend to avoid risks. Transactional leaders are more effective in stable environments, where the followers meet the minimum expectations and the leader meets the basic needs of the followers (Bass, 1985). Transactional leadership emphasizes this exchange process between leaders and subordinates, where leaders promise benefits in exchange for the followers’ agreement with the leader (Bass, 1990). Transformational leadership is often contrasted with transactional leadership, but some theorists claim they can be complimentary. Sometimes transformational leaders must use transactional strategies, as changing the status quo and constantly looking for new strategies may not be necessary (Bass, 1985). Both transformation and transactional leadership focus too much on the leader-follower relationship and not enough on the actual behavior of the leader, for them to be used as the framework for this study.

**Servant Leadership:** This type of leadership emphasizes serving and meeting the needs of others, rather than focusing on one’s self. Leaders have an obligation to serve their followers, giving followers more freedom to showcase their abilities. This places more trust in followers more than any other leadership theory. Unlike in transformational leadership, servant leaders do not have a strong alliance to the organization; instead they place full focus on those who make up the organization. The servant leader emphasizes
the service itself, rather than the results that come from it. Servant leadership holds the belief that the organization’s goals and objectives will be met only by focusing on the workers growth and well-being (Stone, Russell, & Patterson, 2004). This leadership style does not fit within campus recreation employment because these employees do not usually have as strong of a desire to serve others, as they do to develop their own skills and earn extra money.

**Behavioral Approach to Leadership:** This approach is concerned with what leaders actually do; the actions or behaviors they take make them leaders. A leader’s behavior is the best determinant of a leader’s success. Kouzes and Posner (2006) emphasize this definition as the S-LPI has 30 action or behavior statements. In their student workbook, the first chapter states, “We found that leadership is an observable, learnable set of practices” (Kouzes & Posner, 1998, p.3). The five leadership practices that outline Kouzes and Posner’s leadership paradigm are *behaviors* that exemplary leaders display. These are: Challenging the Process, Inspiring a Share Vision, Enabling Others to Act, Modeling the Way and Encouraging the Heart. This study will be emphasizing the behavior approach to leadership, as the instrument being used is based on it (Kouzes & Posner, 2006).

**Leadership in Higher Education:** Astin and Astin (2000) who examined leadership in higher education, describe leadership as a transformative process, which fosters change. This change implies intentionality and purpose. Leaders do not merely hold a leadership role, but all people can be leaders no matter their position. The purpose of leadership development in higher education is to empower students to become the driving force of positive social change in the world, while providing opportunities for the
creation of leadership groups. The values of leadership are as follows: to create an environment where people support and grow with one another, to promote peace with nature as to create sustainability for the future, and to create a community of shared responsibility, where everyone is respected and their welfare matters (Astin & Astin, 2000).

**Student Leadership Practices Inventory**

The Student Leadership Practices Inventory (Student LPI or SLPI) is an instrument designed for measuring leadership behavior in college students (Kouzes & Posner, 2006). The instrument identifies thirty leadership behaviors and actions that fall under five categories, Modeling the Way, Inspiring a Shared Vision, Challenging the Process, Enabling Others to Act and Encouraging the Heart. The Student LPI is measured using a five-point Likert scale with 1 representing rarely and 5 representing very frequently. The Student LPI has two main components, SLPI- self and SLPI- Observer. Both contain the same thirty leadership behaviors; however, the self-version is completed by the student leader, while the observer version is completed by an observer about that student leader (Kouzes & Posner, 2006). The current study will be utilizing the self-version.

The Leadership Practices Inventory was created by James Kouzes and Barry Posner by collecting case studies from over 1,200 managers about their “personal-best experiences” as leaders. After analyzing these studies, they found a pattern of behaviors used when people acted as effective leaders. The student version of the instrument was developed using the same type of case-study method. Outstanding student leaders, as
demonstrated by their nomination to partake in a prestigious collegiate leadership
development workshop, were chosen to participate in the research project. Four students
from this group were interviewed, and these interviews were coded for leadership
behavior themes. This showed that college student leaders engaged in the same
leadership behaviors as managers and that this framework can be applied to the college
student’s leadership experience. The pilot version of the Student LPI was completed by
23 members from a college student senate. This group then participated in a discussion to
assess the clarity and ambiguity of the 30 items. They determined that 25 items were
clear and understandable, while the remaining items needed to be revised. A five person
focus group assessed the revised version of the Student LPI and only minor changes were
suggested (Kouzes & Posner, 2006).

The Student Leadership Practices Inventory consists of five practices of
exemplary leaders. These are Model the Way, Inspired a Shared Vision, Challenge the
Process, Enable Others to Act and Encourage the Heart. Model the Way is described as
building credibility through consistency between beliefs and actions. Leaders must make
their personal values clear and set an example by aligning their actions with these beliefs.
Inspired a Shared Vision is characterized as creating a vision for the future and enlisting
others to share in this vision by appealing to their values, hopes and aspirations. Acting in
this way consists of seeing a future full of possibilities and believing that working
together can make this dream reality. Challenge the Process means finding ways to
improve oneself and learn from mistakes. Leaders who exemplify this leadership domain
motivate others to exceed their limits, while seeking challenges and opportunities to test
their own abilities. Enable Others to Act is the process of getting people to work together
by creating an atmosphere of mutual respect and trust. Leading in this way means fostering collaboration through sharing power and discretion with others. Lastly, Encourage the Heart means recognizing and celebrating other’s accomplishments (Kouzes & Posner, 2006).

**Research Using Student LPI**

Many studies have utilized the Student LPI to assess leadership behavior on a variety of student populations including fraternities, orientation programs, different academic majors and residence halls. The Student LPI has been shown to be acceptable for each of the groups. For example, Posner and Brodsky (1992) assessed the leadership effectiveness of fraternity presidents across the United States. The most effective presidents were found to engage in the five leadership practices more often than their less effective counterparts. Moreover, results were not related to demographic variables. Another study used the Student LPI to explore leadership behavior in orientation advisors (Posner & Rosenberger, 1997). The incoming freshman took the Student LPI observer version about their orientation advisor, along with another evaluation that assessed their effectiveness. The results showed that the effectiveness of the orientation leader was directly correlated with how often he or she partook in each of the five leadership practices. Even when the orientation leader took the SLPI-self and assessed their own effectiveness, results showed that those who said they engaged more frequently in the five leadership practices felt they were more effective as orientation advisors as well.

Most studies using the Student LPI conduct a one-time assessment of their participants; however Grandzol, Perlis and Draina (2010) used a pretest posttest design
on captains of collegiate varsity teams to see how their leadership behavior develops over the season. They found that team captains significantly increased their scores on all five leadership practices from the pretest to the posttest and demonstrated more leadership behavior than their team members. The researchers do make note that often captains are chosen because of their perceived leadership skill, but even so, their experience as captain improved their leadership skills. The current study intends to measure students in a similar pre-posttest manner.
CHAPTER III

METHODOLOGY

Introduction

Using the Student Leadership Practices Inventory, the current study examined how leadership develops in OSU Intramural Sports Basketball Officials by examining the development of the five leadership practices: Model the Way, Inspired a Shared Vision, Challenge the Process, Enable Others to Act, and Encourage the Heart. This study used a pretest posttest design, stratified random sampling, and the S-LPI to see if working as intramural sports basketball official developed leadership behavior.

Selection of Participants

For this study, the researcher chose Oklahoma State University’s Department of Wellness as its site to survey participants. It was selected because of its accessibility to the researcher and the high amount of campus recreation students employed. Intramural Sports is one of the departments in the Department of Wellness that employs students, approximately 200 officials and 20 intramural supervisors throughout the calendar year. Intramural basketball is one of the largest sports offered by the program, with approximately 300 teams participating. At least 70 officials need to be hired each season in order to cover the high number of games. During the 2013 Intramural basketball
season, 75 undergraduate students were hired as basketball officials. Some of these students have officiated other sports (intramural and outside the program) in the past, while some are completely new to officiating. The 2014 season was expected to have around the same amount of officials as 2013. The goal of this research was to survey 40 basketball officials at the beginning of the intramural basketball season and at the end of this season, spanning a time period of five weeks.

**Population.** The population studied was OSU Intramural Sports Basketball Officials. They were chosen as the focus for this study because they are highly accessible to the researcher and because of the ability to conduct a pre-post test on them, using the basketball season as the period of potential leadership development. They are also a common campus recreation employee, as almost every campus recreation department has an intramural program that requires officials to referee the games. The exact population total is unclear, however an appropriate range would be 70 to 80 based on previous years’ totals. The researcher was given permission to survey officials from the Intramural Sports Coordinator.

**Sample.** The invited sample was 40 OSU intramural sports basketball officials. In order to be eligible to participate, the official must have been on the Oklahoma State payroll system. This was crucial because often officials are hired, but cannot be scheduled to work because they do not submit the appropriate paperwork for payroll. Since there was a limit to the amount of surveys that could be administered due to a limited amount of funds, ensuring that invited participants could actually work and have the opportunity for leadership development was crucial. Secondly, participants must have worked at least two shifts per week. Astin’s Theory of Involvement asserts that the
amount of development one can expect is related to the quality and quantity of the involvement (Astin, 1984). To meet the quantity criteria, this study required a certain amount of hours per week. Shifts Monday through Friday are usually 3.5 hours each, while shifts on Sunday are 4.5 hours each. This requirement increased the likelihood that any differences in leadership development from the pretest to the posttest were due to their work as an official.

Using a stratified random sampling technique, this study was designed to have 20 returning officials and 20 new officials. Participants were considered to be a returning official if they had officiated one or more past intramural sports and those with no prior experience in intramural officiating were considered to be new. The previous experience may only be in officiating intramural soccer, basketball, or flag football, as these are all five week seasons and require officials to work with a crew of one or more officials. Intramural basketball officials are usually Oklahoma State University undergraduate students, but some are Northern Oklahoma College Gateway students. These students were allowed to participate in the study.

**Research Design**

In order to have a representative sample for previous work experience as an intramural official, a random stratified sample was used. This is the most appropriate sampling technique for the study since there is a limited amount of questionnaires that can be administered for monetary reasons and each sub-group must be represented. The pre-post design was also chosen as a means for data collection because only administering the S-LPI once would not be very telling if there were no other data for
comparison. Having participants take the questionnaire before the season and again after was beneficial for determining if there was any change in the five leadership practices.

The Student Leadership Practices Inventory can be administered online or in paper format. This study utilized the paper format because of the direct access the researcher had to the participants. It can be expected that if a potential participant is given the S-LPI in their hands, there is a higher chance the official would choose to participate and finish the survey. Relying on participants to go online and take the survey themselves would have put more responsibility on them, rather than on the researcher to reach out to the participant and hand out the survey.

Procedure

This study was conducted on the Oklahoma State University campus, specifically in the Colvin Recreation Center, where the Department of Wellness and Intramural Sports are located. Once IRB approval was granted, the researcher started data collection. This took place in two different time periods: Once, before the intramural basketball season started, and again five weeks later after the regular season ended. There were two initial rule training dates where officials must attend one or the other. The first date was Wednesday, January 15th, 2014 and the second one was Tuesday, January 21st, 2014. As potential officials came into the training, the researcher asked everyone to fill out a card that simply asked for their student ID number (CWID), grade in school, previous experience working as an intramural official, and whether he or she would be willing to participate in a research study that would require him or her to take a 10 minute questionnaire twice in the season. Since the study was using a stratified random sample,
before sampling can occur, the population had to be divided by their previous experience. This card enabled the researcher to divide the population between returning and new officials. The card layout is presented in the appendices.

Sometimes potential officials cannot make these two meetings due to class conflicts or other obligations. To make sure that everyone in the population had the potential to be chosen for the sample, any official who did not complete this card at the rules training, had the opportunity to do so at the mechanics training on Wednesday or Thursday, January 22nd or January 23rd or at preseason, Friday, January 24th. After Friday’s preseason training, the cards were examined to see who was on the payroll system. This was done by looking at the list of approved officials that is created by the Intramural Office Manager. Any official not on the list was taken out of the sample because it was essential that all participants in the study have the opportunity to work. Then, participants were divided into each sub group and randomly selected to get 20 in each previous experience level.

Once the sample was selected, the invited participants were contacted via email. The researcher explained the study and its purpose. The email asked that if the student choose to participate, that he or she arrived at his or her first scheduled shift 15 minutes early in order to take the survey. The researcher had access to the official’s schedule as she is one of the Intramural Sports Graduate Assistants who helps create the schedule. The first week of shifts started Sunday, January 26th and ended Thursday, January 30th. If an invited participant chose not to participate, another official was randomly chosen to take his or her place. During the final week of the season starting Sunday, February 23rd and ending Thursday, February 28th, participants were contacted again via email to ask if
they will partake in the posttest. If they agreed, then the researcher went to their last scheduled shift and had them take the S-LPI again after their shift ended. To increase confidentiality, participants used a combination code of their birth month, shoe size, and last two letters of their mother’s maiden name in order to identify themselves on the pretest and posttest.

**Instrumentation**

The instrument used for this study is the Student Leadership Practices Inventory. It was distributed to 40 intramural sports basketball officials before the start of the intramural basketball season and again after the regular season has ended. Data was collected at the game site, either before the official was scheduled to work his or her first shift (for pretest) or after the official’s last scheduled shift. The S-LPI was created by Kouzes and Posner as part of the Student Leadership Challenge, which includes many products, services and programs that help students reach their leadership potential. The S-LPI is an instrument made for the assessment of leadership skills specifically for college students. It was created to help young people measure their leadership behavior and for them to then take steps in improving these skills (Kouzes & Posner, 2006).

The S-LPI uses a five-point Likert Scale that asks participants to rate themselves in terms of how frequently they engage in the behavior described. The instrument also includes instructions for the participant to read over before taking the survey. For example, the participant is to “Be realistic about the extent to which you actually engage in the behavior,” and “Be thoughtful about your responses; giving yourself all fives or all threes or all ones is most likely not an accurate description of your behavior. Most people will do some things more or less often than they do other things” (Kouzes & Posner,
2013, pp. 2). The next page has the list of thirty leadership behaviors, systematically mixing the five key leadership practices. The six statements that correspond to each behavior are mixed throughout the questions. Below are the list of the five leadership practices and an example of the behaviors statements that fall under that behavior.

**Model the Way** – consists of “setting the example” and “achieving small wins” (Kouzes & Posner, 2006b, p. 11). This was measured with a five-point Likert Scale where 1 represents rarely or seldom and 5 represents very frequently. The statements that measure this are behavior statements 1, 6, 11, 16, 21, and 26. Example statements for this leadership practice are “I set a personal example of what I expect from other people” and “I follow through on the promises and commitments I make.”

**Inspiring a Shared Vision** – consists of “envisioning an uplifting future” and “enlisting others in a common vision” (Kouzes & Posner, 2006, p. 13). This was measured with a five-point Likert Scale where 1 represents rarely or seldom and 5 represents very frequently. The statements that measure this are statements 2, 7, 12, 17, 22, and 27. Example statements for this leadership practice are “I look ahead and communicate about what I believe will affect us in the future” and “I talk with others about a vision of how things could be even better in the future.”

**Challenge the Process** – consists of “searching for opportunities” and “experimenting and taking risks” (Kouzes & Posner, 2006b, p. 14). This was measured with a five-point Likert Scale where 1 represents rarely or seldom and 5 represents very frequently. The behavior statements that measure this are numbers 3, 8, 13, 18, 23, and 28. Example statements that correspond with this leadership practice are “I look for ways...
to develop and challenge my skills and abilities” and “When things do not go as we expected, I ask, ‘What can we learn from this experience?’”

Enabling Others to Act – involves “fostering collaboration” and “strengthening people” (Kouzes & Posner, 2006, p. 15). This was measured with a five-point Likert Scale where 1 represents rarely or seldom and 5 represents very frequently. The action statements that measure this dependent variable are numbers 4, 9, 14, 19, 24, and 29. Example statements for enabling others to act are “I foster cooperative rather than competitive relationships among people I work with” and “I treat others with dignity and respect.”

Encouraging the Heart – involves “recognizing individual contributions” and “celebrating team accomplishments” (Kouzes & Posner, 2006b, p. 16). This was measured with a five-point Likert Scale where 1 represents rarely or seldom and 5 represents very frequently. The statements that correspond with Encouraging the Heart are statements 5, 10, 15, 20, 25, and 30. Example behavior statements for this leadership practice are “I praise people for a job well done” and “I make sure that people are creatively recognized for their contributions.”

Data Analysis

The study had two main hypotheses that require statistical analysis using Statistical Package for the Social Sciences (SPSS) to determine if the results show suggested significant. The primary hypothesis was that there is a significant increase in leadership behavior for each of the five leadership practices among intramural sports basketball officials from beginning of the season to the end of that season. Once the data was entered into SPSS, appropriate tests were run with p measured for significance at
The second hypothesis was non-directional and postulates that there are significant differences between the leadership behavior frequencies based on grade level and previous work experience among intramural sports basketball officials from the beginning of a recreational sport season to the end of that season. To analyze this, an ANOVA was conducted with p measured for significance at <.05.

**Scoring:** Scores from the S-LPI were calculated for all five the leadership practices creating a total score from 30 to 120. Scores were also calculated by each leadership practice ranging from a low 6 to a high of 30. None of the items needed reverse-coding, as the frequency chosen on the Likert Scale represents the score for that item.

**Reliability and Validity**

The internal reliability of the S-LPI was measured using Cronbach’s Alpha Coefficient (Posner, 2012). Alpha’s between .65-.70 are minimally acceptable, .70-.80 are respectable, .80-90 are very good and anything above .90 should be examined to see if the scale can be shortened (Deville, 2003). Posner (2012) found that the Self version had an internal reliability ranging from .69 to .80 for each of the five leadership practices. For different demographics, all the internal reliability coefficients are above .61. This is shown in Table 1. While these alphas are acceptable, having higher internal reliability for a couple of the practices would be desirable. Posner (2012) also found that deleting any of the statements for the five leadership practices did not raise the internal reliability. The S-LPI has test-retest reliability at levels greater than .91 for periods as short as one day and as long as four weeks, however it is expected that scores would change if
respondents took part in leadership opportunities since the first time the respondent took the S-LPI (Kouzes & Posner, 2006).

Table 1. Internal Reliability Analysis for the Student LPI (Cronbach Alpha coefficients) (Posner, 2012, p. 225).

| Internal Reliability Analysis for the Student LPI (Cronbach Alpha Coefficients) |
|---------------------------------|---------|---------|---------|---------|---------|
|                                 | Model   | Inspire | Challenge | Enable  | Encourage |
| Self                            | .69     | .78     | .73      | .69     | .80      |

Validity refers to the degree to which the instrument is measuring what it intends to measure (Kouzes & Posner, 2006). Face validity of the S-LPI was determined by asking student leaders to report on how many experiences they had being in a leadership role. The respondents were placed into three categories of few, moderate, and many opportunities to be in a leadership role. After examining the frequency in which these leaders engaged in the five leadership practices, Posner (2012) found a significant pattern. The more the students reported having been in a leadership role, the more frequently they engaged in the five leadership practices. This is shown in Table 2. Moreover, when the respondents were asked to report how many opportunities they had to develop their leadership skills, a similar significant pattern was found. Those who had more opportunities to develop their leadership skills reported engaging more often in each of the leadership practices. This is shown in Table 3. Validity also refers to the extent to which each scale item is measuring common or different areas (Kouzes & Posner, 2006). Factor analysis has shown that for the five leadership practices, each item
corresponds more with each other, than the items representing other practices (Kouzes & Posner, 2006).

Table 2. Comparisons between Respondents by Opportunities to Be a Leader (Self) (Posner, 2012, p. 229).

<table>
<thead>
<tr>
<th>Leadership Practice</th>
<th>Few (N=2,418)</th>
<th>Moderate (N=2,365)</th>
<th>Many (N=1,738)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>20.7</td>
<td>22.1</td>
<td>23.1</td>
</tr>
<tr>
<td>Inspire</td>
<td>20.0</td>
<td>21.8</td>
<td>23.1</td>
</tr>
<tr>
<td>Challenge</td>
<td>20.2</td>
<td>21.7</td>
<td>22.8</td>
</tr>
<tr>
<td>Enable</td>
<td>23.6</td>
<td>24.0</td>
<td>24.3</td>
</tr>
<tr>
<td>Encourage</td>
<td>21.7</td>
<td>22.9</td>
<td>23.6</td>
</tr>
</tbody>
</table>

*** p<.001

Table 3. Comparison between Respondents by Opportunities to Develop Leadership Skills (Self) (Posner, 2012, p. 229).

<table>
<thead>
<tr>
<th>Leadership Practice</th>
<th>Few (N=2,142)</th>
<th>Moderate (N=1,799)</th>
<th>Many (N=2,580)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>21.0</td>
<td>21.6</td>
<td>22.7</td>
</tr>
<tr>
<td>Inspire</td>
<td>20.3</td>
<td>21.2</td>
<td>22.7</td>
</tr>
<tr>
<td>Challenge</td>
<td>20.4</td>
<td>21.1</td>
<td>22.4</td>
</tr>
<tr>
<td>Enable</td>
<td>23.7</td>
<td>23.8</td>
<td>24.3</td>
</tr>
<tr>
<td>Encourage</td>
<td>21.7</td>
<td>22.6</td>
<td>23.4</td>
</tr>
</tbody>
</table>

*** p<.001

Predictive validity assesses the importance of the instrument: the extent to which S-LPI scores are related to other beneficial variables (Kouzes & Posner, 2006). The S-LPI has been shown to be associated with variables of credibility, cohesion, satisfaction, and member commitment and loyalty (Kouzes & Posner, 2006). For example, fraternity presidents who were the most effective based on several dimensions such as building
team spirit, meeting chapter objectives and facilitating volunteers, engaged in these leadership practices more often than less effective presidents. Also, incoming freshmen who were the most satisfied with their orientation leaders, had orientation leaders who reported a higher frequency of engaging in the five leadership practices as well. Engaging in the five leadership practices does in fact make a difference (Kouzes & Posner, 2006).
CHAPTER IV

FINDINGS

Introduction

The purpose of this study was to take a quantitative look at how leadership skills develop in OSU Intramural Sports Basketball Officials. The study utilized Kouzes and Posner’s Student Leadership Practice Inventory as the instrument to assess the official’s leadership behavior frequencies prior to the start of the intramural basketball season and again at its completion. The S-LPI is separated into five leadership practices: Model the Way, Inspired a Shared Vision, Challenge the Process, Enabling Others to Act and Encouraging the Heart. The main hypothesis being tested stated that there would be a significant increase in the leadership behaviors from the start to the end of the intramural basketball season. The alternative hypothesis stated that were significant leadership behavior differences between returning and new officials. This chapter lays out the results found using SPSS, Statistical Package for the Social Sciences.

Data Screening

Prior to analyzing the data, the surveys were screened to find any missing data. All questions were answered by the participants so no additional calculations to fill the missing data were needed. After the officials completed the posttest questionnaire, the
researcher matched their pretest and posttest questionnaires. Their scores were entered into SPSS, and the appropriate tests were run.

**Group Demographics**

40 intramural basketball officials were chosen to participate in the study. 20 of them were returning officials, meaning they had officiated either intramural basketball, soccer, or flag football in the past. 20 of them were new officials and had no prior experience officiating those three intramural team sports. Thus, there were 40 participations (N=40) who completed the pretest. In order to be eligible to take the posttest, officials must have completed the season and worked at least two shifts per week. Three new officials were not able to meet this requirement and thus, only 37 officials completed the posttest (N=37). Out of these 37 officials, twenty-four percent were freshman (N=9), sixteen percent were sophomores (N=6), twenty-nine percent were juniors (N=11), and twenty-nine percent (N=11) were seniors.

**Hypothesis I**

The main hypothesis being tested was whether there was significant increase in the leadership behavior for each of the five leadership practices among Intramural Sports basketball officials from beginning of the season to the end of that season. To assess this, a matched pair’s t-test was run on SPSS to compare the overall pretest mean to the overall posttest mean. Each respondent had a possible score of 30 to 150. The overall pretest mean was 103.43 with the scores ranging from 74 to 125. The overall posttest mean was 117.81 with the scores ranging from 96 to 148. This suggests that there was an increase. Since p<.001, the findings were significant and there was a significant
increase in the official’s overall leadership score. Refer to table 4.1a and 4.1b for these results.

Table 4.1a: Leadership Score Paired Sample Statistics

<table>
<thead>
<tr>
<th></th>
<th>Pair 1</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>N</td>
<td>Std. Deviation</td>
<td>Std. Error Mean</td>
</tr>
<tr>
<td>PreTest Total</td>
<td>103.4324</td>
<td>37</td>
<td>13.87952</td>
<td>2.28178</td>
</tr>
<tr>
<td>Post Test Total</td>
<td>117.8108</td>
<td>37</td>
<td>12.33522</td>
<td>2.02790</td>
</tr>
</tbody>
</table>

Table 4.1b: Leadership Score Paired Sample Tests

<table>
<thead>
<tr>
<th></th>
<th>95% Confidence Interval of the Difference of Mean</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lower</td>
<td>Upper</td>
<td>t</td>
<td>df</td>
</tr>
</tbody>
</table>

Model the Way

Since there was a significant increase in the overall leadership score, each of the five leadership practices were analyzed to see if each practice by itself also found a significant increase. Model the Way is characterized as setting the example for others and making personal values clear to the group. Model the Way has six behavior statements in the survey that respondents answered with a score of one to five for each. This creates a possible range of scores from six to thirty. The pretest mean was 21.08 with a range of scores from 14 to 28, and the posttest mean was 24.05 with a range of 17 to 29. This proved to be significant with a p-value < .001. Refer to the tables below for the results.
Tabl 4.2a: Model the Way Paired Samples Statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>PreTotal- Model the Way</td>
<td>21.0811</td>
<td>37</td>
<td>3.53065</td>
<td>.58043</td>
</tr>
<tr>
<td>PostTotal- Model the Way</td>
<td>24.0541</td>
<td>37</td>
<td>3.18805</td>
<td>.52411</td>
</tr>
</tbody>
</table>

Table 4.2b: Model the Way Paired Samples Test

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PostTotal</td>
<td>-2.97297</td>
<td>4.05166</td>
<td>-.66609</td>
<td>-4.32386</td>
<td>-4.463</td>
<td>36</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>PreTotal</td>
<td>-3.06474</td>
<td>4.05166</td>
<td>-.66609</td>
<td>-4.32386</td>
<td>-4.463</td>
<td>36</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

**Inspired a Shared Vision**

Inspired a Shared Vision is characterized as creating a vision for the future and enlisting others to share in this vision by appealing to their values, hopes and aspirations. Acting in this way consists of seeing a future full of possibilities and believing that working together can make this dream reality. The S-LPI has six statements that refer to this leadership practice. Each statement is evaluated on a one to five scale, which creates a total possible range of six to 30. The overall pretest mean for Inspired a Shared Vision was 19.97, with a range of 10 to 28 and the overall posttest mean was 23.32 with a range of 17 to 30. There was an apparent increase, and the results showed that this increase was significant with p<.001. Tables 4.3a and 4.3b display the results from this leadership practice.

Table 4.3a: Inspired a Shared Vision Paired Samples Statistics
Inspired a Shared Vision - Paired Samples Statistics

<table>
<thead>
<tr>
<th>Pair 1</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std.Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>PreTotal- Inspired a Shared Vision</td>
<td>19.9730</td>
<td>37</td>
<td>3.45194</td>
<td>.56750</td>
</tr>
<tr>
<td>PostTotal- Inspired a Shared Vision</td>
<td>23.3243</td>
<td>37</td>
<td>3.52809</td>
<td>.58002</td>
</tr>
</tbody>
</table>

Table 4.3b: Inspired a Shared Vision Paired Samples Test

Inspired a Shared Vision - Paired Samples Test

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval</th>
<th>t</th>
<th>df</th>
<th>Sig (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PostTotal-PreTotal</td>
<td>-3.35135</td>
<td>3.41741</td>
<td>.56182</td>
<td>-4.49077 -2.21193</td>
<td>-5.965</td>
<td>36</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

Table 4.4b: Challenge the Process Paired Samples Test

Challenge the Process

Challenge the Process means finding ways to improve oneself and learn from mistakes. Leaders who exemplify this leadership domain motivate others to exceed their limits, while seeking challenges and opportunities to test their own abilities. There are six statements in the S-LPI that refer to this leadership practice. On a scale of one to five participants reported how often they engaged in the said behavior. The pretest mean was 19.41 with scores ranging from 12 to 27, and the posttest mean was 23.14 with a range of 17 to 29. This increase was significant with p<.001. Refer to Tables 4.4a and 4.4b for results.
Enable Others to Act

Enable Others to Act is the process of getting people to work together by creating an atmosphere of mutual respect and trust. Leading in this way means fostering collaboration through sharing power and discretion with others. The S-LPI has six statements that refer to this leadership practice. Using the same one to five scale, there is a possible score of six to 30. The pretest mean was 22.22 with a range of 14 to 30, and the posttest mean was 24.14 with a range of 16 to 30. This was a significant increase because \( p = .003 \). The results are shown in Tables 4.6a and 4.6b.

Table 4.5a: Enable Others to Act Paired Sample Statistics

<table>
<thead>
<tr>
<th>Pair 1</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PreTotal</td>
<td>22.22</td>
<td>3.43297</td>
<td>.60327</td>
<td>-3.14240 -.69544</td>
<td></td>
<td></td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

Table 4.5b: Enable Others to Act Paired Samples Test

<table>
<thead>
<tr>
<th>Pair 1</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PostTotal</td>
<td>-1.918</td>
<td>3.66953</td>
<td>.60327</td>
<td>-3.14240 -.69544</td>
<td></td>
<td></td>
<td>.003</td>
</tr>
</tbody>
</table>
Encouraging the Heart

Encourage the Heart means recognizing and celebrating other’s accomplishments. Leaders who act in this way find ways to create a team atmosphere and acknowledge those who are doing well. There are six behavior statements in the S-LPI that refer to this leadership practice, with a possible range of scores from six to 30 for this practice. The pretest mean was 20.76 with a range of 13 to 28, and the posttest mean was 23.16 with a range of 16 to 30. This increase was significant with a p-value < .001. Refer to tables 4.6a and 4.6b for the results.

Table 4.6a: Encouraging the Heart Paired Sample Statistics

<table>
<thead>
<tr>
<th>Encouraging the Heart Paired Samples Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Pair 1</td>
</tr>
<tr>
<td>PreTotal- Encouraging the Heart</td>
</tr>
<tr>
<td>PostTotal- Encouraging the Heart</td>
</tr>
</tbody>
</table>

Table 4.6b: Encouraging the Heart Paired Samples Test

<table>
<thead>
<tr>
<th>Encouraging the Heart Paired Samples Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Paired Differences</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Pair 1</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>PostTotal</td>
</tr>
</tbody>
</table>

Hypothesis II

The second hypothesis for this study is that there are significant differences between the leadership behavior frequencies based on previous work experience among intramural sports basketball officials from the beginning of a recreational sport season to
the end of that season. Participants reported if they had worked as an intramural official prior to this season. Those who had officiated intramural basketball, soccer or flag football were labeled as returners, while those who had not were referred to as new. After running a one-way ANOVA in SPSS, the results showed not to be significant with \( p \) at .877 for pretest scores and .769 for posttest scores. The pretest mean for returners was 103.1 and 103.82 for new officials. The posttest mean for returners was 117.25 and 118.47 for new officials. Refer to tables 4.7a and 4.7b for the results.

### Table 4.7a: Returners and New Pretest/Posttest Descriptives

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>95% Confidence Interval of the Difference</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>PreTest</td>
<td>Returner</td>
<td>20</td>
<td>103.1000</td>
<td>13.58366</td>
<td>3.03740</td>
<td>96.7427</td>
<td>109.4573</td>
</tr>
<tr>
<td></td>
<td>New</td>
<td>17</td>
<td>103.8235</td>
<td>14.62974</td>
<td>3.54823</td>
<td>96.3016</td>
<td>111.3454</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>37</td>
<td>103.4324</td>
<td>13.87952</td>
<td>2.28178</td>
<td>98.8048</td>
<td>108.0601</td>
</tr>
<tr>
<td>Posttest</td>
<td>Returner</td>
<td>20</td>
<td>117.2500</td>
<td>11.21970</td>
<td>2.50880</td>
<td>111.9990</td>
<td>112.5010</td>
</tr>
<tr>
<td></td>
<td>New</td>
<td>17</td>
<td>118.4706</td>
<td>13.85694</td>
<td>3.36080</td>
<td>111.3460</td>
<td>125.5952</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>37</td>
<td>117.8108</td>
<td>12.33522</td>
<td>2.02790</td>
<td>113.6980</td>
<td>121.9236</td>
</tr>
</tbody>
</table>

### Table 4.8b: One-Way ANOVA

<table>
<thead>
<tr>
<th></th>
<th>Sun of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PreTest</td>
<td>Between Groups</td>
<td>4.810</td>
<td>1</td>
<td>4.810</td>
<td>.024</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>6930.271</td>
<td>35</td>
<td>198.008</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>6935.081</td>
<td>36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td>Between Groups</td>
<td>13.690</td>
<td>1</td>
<td>13.690</td>
<td>.088</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>5463.985</td>
<td>35</td>
<td>156.114</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5477.676</td>
<td>36</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Conclusion

The study tested two hypotheses. The primary hypothesis stated that there would be a significant increase in the leadership behavior of officials from before and after the intramural basketball season. The null hypothesis states:

Null Hypothesis: There is no significant difference in leadership behaviors as measured by the Student Leadership Practices Inventory among Intramural Sports basketball officials from the beginning of a recreational sport season to the end of that season.

Based on the results presented above, the null hypothesis would be rejected because there was a significant increase in the leadership scores for participants from pretest to posttest. Moreover, after analyzing each of the five leadership practices, there was a significant increase for each.

The second hypothesis stated that there would be significant differences between returning and new officials on their pretest and posttest scores. The null hypothesis is stated as:

Null Hypothesis: There is no significant difference in leadership behavior as measured by the Student Leadership Practices Inventory based on previous work experience among intramural sports basketball officials from the beginning of a recreational sport season to the end of that season.

The ANOVA showed that there was no significant leadership score differences between returning and new officials. As a result, the null hypothesis would not be
rejected because it was shown to be true. The following section will discuss the meaning of these results and what it means for campus recreation, student employees, and future research in the field.
CHAPTER V

CONCLUSION

Introduction

Research has shown many positive outcomes for student participation in campus recreation programs (Todaro, 1993; Collins et al; 2001; Hall, 2006; Haines, 2001), however, there are far fewer studies that focus on the effect campus recreation has on student employees. Since these programs are primarily staffed by students, it is important to understand what benefits extend to the worker as well. Moreover, the majority of funds universities pay to support university recreation services go to paying these student employees. The purpose of this study was to fill the gap in the literature and take a quantitative approach to understanding campus recreation’s role in developing student employees to become leaders. This study used the S-LPI to assess leadership behavior of intramural basketball officials before and after the intramural basketball season. The results presented previously will now be discussed further.

Discussion

This study examined how leadership developed in intramural basketball officials throughout the intramural basketball season. Participants took the S-LPI before and after the season, and a matched pairs t-test was utilized to see if there was a significant
increase. The S-LPI is a leadership measurement tool targeted for college students. It is a 30 statement questionnaire that asks respondents to report how frequently they do the said leadership behavior. Using this instrument, the study was able to focus on specifically leadership development.

While the primary research objective was to examine leadership development, understanding the participants and their attrition rate could also be beneficial. Out of the 40 officials chosen to participate, 20 of them were returning officials and 20 were new. In order to be eligible to take the posttest, officials had to complete the season and work at least two shifts a week. Three participants decided to quit officiating at some point during the season and all three were new officials. This suggests that retention for experienced officials is higher than for new ones. Logically, if an official is coming back for another season, he or she must have found their first experience with the program to be positive and would more likely work throughout the current season. Moreover, he or she knows what to expect coming into the season. For two of the officials that dropped out, they chose to quit because they felt overcommitted adding officiating to their school and other extracurricular obligations. Returning officials understand the work required for this job and therefore may be less likely to feel overworked. While predicting who was going to drop out was not a hypothesis for this study, it is a noteworthy outcome. Having retention and keeping your employees coming back season to season in intramural programs may be crucial to keeping the attrition rate low throughout the season.

The main goal of this study was to see if campus recreation can be a setting for leadership development of student employees, using intramural basketball officials as the sample. The results showed a significant increase in leadership behavior from the pretest
to the posttest for the officials who completed the entire season. These findings suggest that working in campus recreation as an intramural official develops leadership. Student officials are put into a role where they must make quick decisions, diffuse heated situations, communicate effectively with each other, and be confident in their calls. The experiences that campus recreation, and specifically intramural sports, provides allows for student employees to develop and learn skills that they can take to their respective future careers.

Once the results showed a significant increase in the overall leadership score, each of the five leadership practices were examined to see which ones had a significant increase as well. Model the Way, Inspired a Shared Vision, Challenge the Process, Enabling Others to Act, and Challenge the Process all had a significant increase from pretest to posttest.

**Model the Way**: This practice is characterized as setting the example for others and being consistent with one’s beliefs and actions. Officials had an average increase of 2.97 for statements related to this leadership practice. There may have been an increase in modeling the way because officials start to learn how to be consistent with their calls and officiating style. Also, there are numerous people watching officials such as participants, other officials, and intramural supervisors. Therefore, setting a good example for oneself and others is very important to receiving positive feedback and giving the program a good name.

**Inspired a Shared Vision**: This leadership practice is about getting others to come together in order to accomplish a certain goal. Officials reported an average gain of 3.35
from their pretest to posttest. This was the second highest increase out of the five leadership practices. This high increase may be due to the fact that collaborating, communicating, and working together are extremely important skills for an intramural official, as they are constantly working with at least one other co-referee. Throughout the season, they had opportunities to work with a wide variety of people and they must find a way to officiate that game effectively together. Intramural programs can further emphasize this leadership practice in trainings because of how crucial it is to successfully officiate a game.

**Challenge the Process:** This practice is about learning from mistakes and searching for ways to improve oneself. An example statement from the S-LPI is, “When things do not go as we expected, I ask, ‘What can we learn from this experience’” (Kouzes & Posner, p.3, 2013). Participants had an average increase of 3.73 from pretest to posttest, which was the highest increase out of the five practices. This increase may be attributed to the fact that officials are regularly being evaluated and critiqued in order to help them improve. Officiating is all about learning from situations and calls in order to not make the same mistake twice. The best officials are able to view heated games or incorrect calls as a learning experience instead of just an error or a negative incident. The fact that this was the highest increase is not surprising because of the emphasis campus recreation places on student development and learning from past mistakes.

**Enabling Others to Act:** This leadership practice is similar to Inspired a Shared Vision because it is also about fostering collaboration, however it is more focused on creating relationships based off respect, dignity, and trust. Leaders who act in this way trust co-workers and believe in their ability to make good decisions and rise to the
occasion. Enabling Others to Act had an average increase of 1.92 from pretest to posttest. This increase may be because officials have to learn to trust that their co-official is going to make the correct calls. Officials have primary zones of coverage where they only call violations or fouls in their zone. Without trusting your partner, officials cannot keep their focus on their primary zone. This leadership practice had the lowest increase out of the five leadership practices. Intramural training programs could possibly emphasize more trust and mutual respect among employees so that each person can fully focus on their specific job.

**Encouraging the Heart:**  Encouraging the Heart is about recognizing when others in the organization do something well and acknowledging that success to them. This creates a positive environment, where an employee’s efforts are validated and celebrated. The average increase for this leadership practice was 2.41. This increase may be because officials learn to point out positives, instead of just mistakes in their co-officials. They begin to see the importance of positive feedback and acknowledgement. Intramural supervisors are trained to critique officials with encouraging remarks along with skills that can be improved. Officials may be picking up on this technique. The importance of positive feedback should be highlighted in trainings for all employees.

The secondary hypothesis tested the differences between returning and new officials on their pretest and posttest scores. It was hypothesized that returning and new officials would have significant differences. After the findings showed that there was a significant increase between pretest and posttest results for all officials, it would logically make sense that those had had worked as an intramural official before would have higher pretest and posttest results than those who had not. The findings however did not support
this claim. The results showed that there was no significant difference between returning and new officials for pretest or posttest results.

These results seem conflicting because if returning officials had previously officiated a whole intramural sport season, they should already have an increase of leadership behavior, but that was not reflected in the pretest or posttest. There could be several reasons behind this apparent inconsistency. To begin with, this study tested one’s leadership behavior directly after the season ended. Since previous officials had worked the semester prior and sometimes even a year before, the leadership effects from those seasons of officiating may be less obvious to him or her. This is not implying that their previous season intramural officiating had no effects on their leadership behavior. It could just be that after two months or more of not working as an intramural official, their leadership behavior was less evident in their minds. Additionally, new officials may have had previous leadership experiences such as another part-time job coming into the season that could have affected their leadership behavior. It may be possible that the students who choose to officiate, already have leadership experiences that would make them more inclined than others to try out for this job. This could explain a lack of disparity between returning and new officials in their pretest and posttest scores.

Regardless of the results from the secondary hypothesis, the findings from this study help to confirm that campus recreation can play a key role in developing student leaders. Moreover, these results show that campus recreation programs might be an essential resource at the university setting for out of classroom learning experiences not just for participants, but also for student employees. Professionals in the field can further justify their existence in higher education with quantitative evidence of leadership
development, instead of just participation numbers or program descriptions. Also, campus recreation can continue to hire student employees to operate their programs promoting that there can be far more benefits for the student beyond monetary compensation. Lastly, campus recreation is one step closer to aligning their goals and outcomes with university mission statements. Student development is a common goal of universities and providing evidence that university recreational programs and services can help contribute to this goal will keep these programs operating for years to come.

**Limitations**

One limitation for this study was the small sample size. With three new officials dropping out, only 37 pretest and posttest were used for both new and returning officials to analyze the results. While the findings proved to be significant, having a higher sample would have allowed for more confidence in the results. Using a different leadership measurement instrument that is free may allow for a larger sample size. Also, while it was made very clear that official’s participation in the study did not affect their employment, eliminating this barrier may not have been fully possible because officials still see the researcher as somewhat of an authority figure. This may have caused some officials to feel obligated to take the questionnaire and could have affected the results. Using a researcher who has no connection to their employment may have allowed for this limitation to be eliminated.

Another limitation is the ability to generalize to all universities and campus recreation programs. The study used intramural basketball officials at Oklahoma State University. While these results could be evident of other intramural and campus
recreation programs, they may not necessarily fit other university recreational student employees. Also, the ability to generalize the affects of basketball officiating to other non-officiating campus recreation jobs may be limiting. Officiating may require different knowledge or skills than a facility manager or personal trainer for example. Therefore, there may be less of an ability to apply results from basketball officials to other type of recreation student employees.

**Recommendations for Future Research**

Expanding research in this field is critical as there is a large gap in the literature on the topic of campus recreation student employees. Future research could examine how leadership develops in several types of student employees in the university recreational setting such as lifeguards, facility managers, sport club officers, outdoor adventure guides, group fitness instructors, and personal trainers. This study confirms the idea that there is leadership development occurring, and now researchers can feel even more validated to examine other types of student recreation employees.

Future research could also take a qualitative approach to examining student employment development. Qualitative research is valuable because it allows for people to describe experience and overall themes. This approach could also look at more than just leadership behavior and analyze what other developmental skills are learned. While focusing on leadership allowed for this study to put all its energy towards one construct, it would be interesting to see what other traits can be attributed to working in campus recreation.
Another idea for a future study could be to see how certain constructs like leadership are related to job performance. Are those officials who have higher leadership scores also performing better on the court? Are facility managers that exhibit more confidence and communication skills able to lead their staff and manage the facility better? Understanding how these traits affect a certain job would be an interesting research topic to investigate.

The findings from this study suggested that returning and new officials did not have any statistical differences in their pretest and posttest results. This could be because returning officials’ leadership experiences from previous seasons may have been less visible in their mind or they could have faded. Thus, future studies could replicate this study, but with the addition of surveying the officials five weeks after the season had ended in order to see what occurs with their leadership scores after time has passed.

Lastly, researchers could take this same concept of measuring a construct in employees as part of an assessment. Campus recreation often has goals and outcomes that each department strives for, however many time those goals are not assessed. Professionals could use the S-LPI or other instruments that measure leadership and various skills to see if they are actually meeting the goals they set out to accomplish for their student staff.

**Concluding Comments**

Campus recreational professionals continue to justify their existence in the higher education setting in order to continue to receive funding from their university. Placing a higher emphasis on the affect campus recreation has on the student employee may be a
more beneficial approach than focusing on participation benefits because these programs are primarily staffed by students. Moreover, a majority of the funds appropriated go to paying these students. This study was a needed starting point to fill this research gap. The results found in this study set the foundation for future researchers to build upon by examining more developmental traits in different types of recreation student employees. Overall, the results from this study are encouraging and can be used to justify funds by aligning outcomes with university goals of leadership and student development; however, this topic needs to be addressed further by professionals and researchers in the field in order to keep campus recreation a thriving university structure for students.
REFERENCES


Collins, J.R., Valerius, L., King, T.C. & Graham, A. The relationship between college students’ self-esteem and the frequency and importance of their participation in


APPENDICES

Appendix A – Population Demographic Card

CWID____________

Grade Level (in years not credit hours):
Freshman  Sophomore  Junior  Senior  Other____________

Have you worked as an intramural sports official prior to this season?
(For baseball, soccer or football only)
________ Yes ________ No

Are you willing to participate in a research study that requires you to
take a 10 minute questionnaire twice in the season?
________ Yes ________ No
Appendix B- Participation Information Sheet

**Project Title:** Examining leadership development in campus recreation student employment using the Student Leadership Practices Inventory: Pre-post design on intramural basketball officials.

**Principal Student Investigator:**
Julie Mizraji, MS Student
Leisure Studies, Oklahoma State University
julie.mizraji@okstate.edu

**Invitation:** You are invited to participate in a research study that will examine the self-reported leadership behavior of intramural basketball officials from the beginning of a recreational sport season to the end of that season. The purpose of this research study is to take a quantitative look at how leadership develops in campus recreation student employees, using intramural basketball officials as the sample. The study will be using the questionnaire, the Student Leadership Practices Inventory (S-LPI), which was developed by Kouzes and Posner (2006).

**What to Expect:** As a potential participant, you will be contacted twice regarding your participation in the study. You will be asked to fill out the S-LPI once before your first scheduled shift and again after your final regular season scheduled shift. The S-LPI takes approximately 10 minutes to complete. You must complete each statement and return the S-LPI to the researcher immediately after completion.

**Risks:** There are no risks associated with this project which are expected to be greater than those ordinarily encountered in daily life.

**Benefits:** You may benefit by understanding if and how your leadership behaviors develop throughout the intramural basketball season. For campus recreation professionals, this research will potentially help them further justify campus recreation’s role in higher education by presenting leadership benefits to student employees.

**Compensation:** You will not receive any compensation for your participation in this study; nor will your standing or employment as an intramural basketball official be affected if you choose not to participate.

**Confidentiality:** You will be asked to identify yourself with a combination code of your birth month, shoe size, plus the last two letters of your mother’s maiden name in order to match your pretest and posttest. The pretest data will be placed in a secured envelope with all the other pretests and will not be looked at until the posttest data has been collected. The completed S-LPI’s will be held in the researcher’s bottom desk drawer in a secured office until they are to be analyzed. No one besides the researcher will have access to this drawer.

**Voluntary Participation:** Participation in this study is voluntary, as you may choose to not participate in the pretest or posttest. Choosing to not participate will not affect your standing or employment as an intramural sports basketball official.

**Contact:** If you would like to discuss your participation in the study and/or request results after study completion, please contact the researcher Julie Mizraji at (405) 744-7407 or at julie.mizraji@okstate.edu. You may also contact my advisor Lowell Caneday, Ph.D., 183 Colvin Center, Leisure Studies, Oklahoma State University, Stillwater OK 74078 (405) 744-5503. If you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405-744-3377 or irb@okstate.edu.

**If you choose to participate:** Returning your completed questionnaire to the researcher indicates your willingness to participate in this research study.
Appendix C- IRB Approval Letter

Oklahoma State University Institutional Review Board

Date: Thursday, December 12, 2013
IRB Application No: ED13193
Proposal Title: Examining leadership development in campus recreation student employment using the Student Leadership Practices Inventory: Pre-post design on intramural sports basketball officials
Reviewed and Processed as: Exempt

Status Recommended by Reviewer(s): Approved Protocol Expires: 12/11/2016

Principal Investigator(s):
Julie Mizraji
104 Colvin Center
Stillwater, OK 74078
Lowell Caneday
180 Colvin Center
Stillwater, OK 74075

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval. Protocol modifications requiring approval may include changes to the title, PI, advisor, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Dawnett Watkins 219 Cordell North (phone: 405-744-5700, dawnett.watkins@okstate.edu).

Sincerely,

Sheila Kennison, Chair
Institutional Review Board
VITA

Julie Ann Mizraji

Candidate for the Degree of

Master of Science in Leisure Studies

Thesis: EXAMINING LEADERSHIP DEVELOPMENT IN CAMPUS RECREATION STUDENT EMPLOYMENT USING THE STUDENT LEADERSHIP PRACTICES INVENTORY: PRETEST-POSTTEST DESIGN ON INTRAMURAL SPORTS BASKETBALL OFFICIALS

Major Field: Master of Science in Leisure Studies

Biographical:

Education:

Completed the requirements for the Master of Science in Leisure Studies at Oklahoma State University, Stillwater OK in May 2014.

Completed the requirements for a Bachelor of Arts in Communication at the University of California, Davis, in Davis, CA in June 2012.

Experience:

Graduate Assistant for Intramural Sports for the Department of Wellness at Oklahoma State University

Professional Memberships:

National Intramural and Recreational Sports Association (NIRSA)