

IDENTITY DEVELOPMENT AMONG
INTRAMURAL SPORTS
PARTICIPANTS

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IDENTITY DEVELOPMENT AMONG
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PREFACE

The purpose of the study was to provide a replication of a similar study completed by Murphy (1985). Murphy hoped to find a positive relationship between intramural participation and student development but his findings were not conclusive, and, therefore, a replication of the study was needed to further investigate the link between student development and intramural sports.

This study attempted to determine the relationship between student intramural participation and the normative data of college students from the Erwin Identity Scale (EIS) (Erwin, 1979). The EIS was the instrument used, and was a scale designed to assess a student's sense of identity.

A total of 101 college intramural sports participants of the ages of 18-24 from a large university located in the south central part of the United States were studied. The study helped identify the influence of participation in intramural sports on the emergence of adult identity. Understanding if intramural participants had higher levels of identity may help with the understanding of the overall development of college students. This understanding would recognize intramural sports programs as a part of a college student's educational process. It is important to understand that participation in intramural and recreational sports programs was found to be one of the most fundamental ways in which individuals can prepare for lifelong enjoyment of their leisure time (Broughton, & Griffin 1994).

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CHAPTER I. INTRODUCTION

Today more people attend colleges and universities than ever before. In 1953, 2,000,000 students enrolled for undergraduate and professional degrees; in 1963 the figure was 4,000,000; in 1973 it was 7,000,000; in 1983 it was 12,000,000; and in 1999 the student enrollment was over 15,000,000 (Chickering, 1969; and Meyer, 1999). With the increase in student enrollment the need for understanding student development has become more challenging.

Student development issues and theories have been studied since the early twentieth century. Psychological theorists such as Sigmund Freud, Carl Jung, and B. F. Skinner have been part of the large evolution of student development theories (Evans, Forney, & Guido-DiBrito, 1998). Since the original development of these theories a number of them have been revised over the years (Astin, 1968; Chickering, 1969; Chickering & Reisser, 1993; King & Kitchener, 1994; Miller, 1982; and Sanford, 1967). The knowledge of student development theories has enabled student affair professionals to proactively identify and address students needs, design programs, develop policies, and create healthy college environments that encourage positive growth in students (Evans, Forney, & Guido-DiBrito, 1998).

It is vitally important to know how a college or university can foster student development. It is also important to determine what types of programs are most beneficial in promoting this development. One of the major investigators of student development has been Dr. Arthur Chickering. Schuh (1994) stated that over the past 25 years Chickering's theory (1969) has generated as much research as any work in the field

of student development. In Education and Identity (1969), Chickering presented the importance of the student development:

... a developmental period of young adulthood does seem to exist now, a period during which certain kinds of changes occur or strong potential for such change exists, a period during which certain kinds of experiences may have substantial impact. This period merits special attention because mounting evidence indicates that patterns established at this time tend to persist long into adulthood. And because so many adults will move through this period in a college setting, it merits special attention so that institutions of higher education can better serve society and more effectively help young persons move productively from adolescence to adulthood. (p. 2)

Chickering's work has been widely used and has served as the foundation for extensive research and many practical applications for the concept towards the understanding of student development (Evans, Forney, & Guido-DiBrito, 1998). The original theory and its revisions (Chickering & Reisser, 1993) are addressed more in-depth in Chapter Two.

Following Chickering's work, Winston, Bonney, Miller, and Dagely (1988) reinforced the notion that student development must be encouraged throughout college years. They indicated that:

The higher education enterprise has responsibility attending to the total development of its various student clients, no matter what their ages, education aspiration, initial level of academic preparation, career goals, or cultural heritages. There can be little doubt that much of this comprehensive growth development

occurs spontaneously and naturally as a direct result of student participation in the numerous social, cultural, and physical activities common to educational environment where people come together intellectual stimulation and social interchange. (pp. 73-74)

When students enter into a college or university setting confusion, stress, and low confidence can become a reality. Student services, sometimes known as student affairs, is the entity responsible for assisting students in solving college-related challenges. Student services focus on the out of the classroom experiences for college students. It is important that the students have a good selection of organizations and/or programs to choose from to help assist with their development.

One type of a student program is the intramural sports program. This program is designed to allow students to grow physically, socially, and mentally. Since their earliest existence, intramural sports programs have been purported to assist with student development. Mitchell (1925) wrote Intramural Athletics, a book that outlined the objectives of intramural sports programs around the country. He cited five benefits of participating in intramural sports: recreational development, social contacts, mental and physical health, and scholarship. These five areas supported the idea of educating the whole student.

Mueller & Reznick (1979) stated:

The purpose of IM-Rec., (intramural sports), sports programs is very simply and fundamentally to provide human beings with experiences that will assist them in achieving a better state of being. All of these experiences should be directed toward the

individual's total development: physical, social, emotional, spiritual, and intellectual. (p. 18)

6)

Pope (1978) stated that intramural sports programs should fulfill basic human needs and interests. He believed that the purposes of intramural sports were to allow participants to feel a sense of recognition, achievement, affection, security, social approval, new experiences, and beauty and harmony.

Means (1973) cited six objectives for intramural sports which are related to individual development: 1) physical and mental health and fitness; 2) the pursuit of recreational activities both present and future; 3) coordination; 4) development of varsity material; 5) scholarship; and 6) social values. Bernard Pollack (1977) stated, "A sound intramural program will enable participants to explore their actions and judgements rather than suppress them" (p. 42). Hyatt (1977) researched a sample of 25 intramural handbooks and concluded that mental/emotional health and social development were among the most common program objectives.

In Students in Higher Education (1968), the Hazen Foundation's Committee reported that the American higher education had not paid enough attention to the total intellectual and personality development of the student. Wedemeyer (1968) also stated that intramural sports should be concerned with the total growth of the individual. Historically, intramural sports were housed in either a physical education department or an athletic department (Mueller & Reznik, 1979). These departments had control over the exact scope of the intramural sports programs, until Haniford (1968) reported that there was a definite shift of intramural programs away from physical education departments to the student services divisions. Mass, Mueller, and Anderson (1974)

concurred that such a shift was occurring. The similarity of the goals of intramural sports and student services makes it appropriate for them to be within the same administrative division of an institution.

Statement of the Problem

Little research linking student development theory and intramural sports participation can be found in the recent literature. Yet intramural sports are part of student services and should be viewed as a viable avenue for student growth. Stevenson (1975) stated, "To date there is no valid evidence that participation in sport causes any verifiable socialization effects. The stated education legitimization of physical education and of athletics must, therefore, remain in the realm of 'belief' and should not be treated as 'fact' " (p. 297). Milton (1992) indicated that "little research has been done regarding the application of student development theories to the field of recreational sport" (p. 3). The research that is being done seems inadequate. The difficulty is that there really is no research that helps campus recreation professionals confirm that intramural sports has been a determinant of student development. The problem explored in this study was to determine if participation in intramural sports influences development of identity among college students.

Purpose of Study

The purpose of the study was to provide a replication of a previous study completed by Murphy (1985). Murphy's problem was to determine "how participation in intramural sports programs influence in a positive manner development of Chickering's

vector of identity among college freshman?" (p. 4). Murphy believed he would find a positive relationship between intramural participation and student development, but he did not come to that conclusion. The literature supported the possibility of a link between student development and intramural sports. Therefore, a replication of Murphy's study seemed warranted. This study assessed the identity of student intramural participants and compared the results to normative data of college students using the Erwin Identity Scale (EIS) (Erwin, 1979). This instrument was designed to measure dimensions of a student's identity. It was conceptually based on the original ideas of Erikson (1950, and 1968), Chickering (1969) and Marcia (1966). The EIS yielded three subscale scores that are hypothesized to be the basic constructs of identity.

The three basic constructs of the EIS are Confidence, Sexual Identity, and Conceptions About Body and Appearance. These three subscales merged from Chickering's work (1969). Chickering postulated that identity had two important aspects: conceptions concerning body and appearance and clarification of sexual identification. Erwin furthered the concept by suggesting that personal confidence would be the third component of identity. He maintained that, although Chickering did not directly mention personal confidence when he quoted Erikson's ideas about inner capital and accrued confidence, he implied that self-assurance was a necessary component of identity (Hood, Riahiinejad, & White, 1986).

From this perspective the study was aimed at identifying college students of the ages of 18-24 from a large university located in the south central part of the United States. Being able to understand how intramural participants establish identity may help with the understanding of the overall development of students. This understanding may

allow the intramural sports program to be recognized as a viable part of the college educational process. In addition, it is important to understand that participation in intramural and recreational sports programs is one of the most fundamental ways in which individuals can prepare for lifelong enjoyment of their leisure time (Broughton, & Griffin 1994).

Need for the study

Geller (1976) wanted to determine, on the basis of theory and research related to student development, how students developed by participating in intramural sports. Following Geller's research, Murphy (1985) attempted to determine the influence of participation in intramural sports on the development of college students based on Chickering's vector of identity. Both research projects suggested and recommended more studies to help discover the "facts" about any relationship between student development and intramural sports.

There remains a need for considerable research into the specific elements of individual development that may be enhanced by participation in intramural sports. Most of the information available speculated about how important participation in intramurals can be for student development. Milton (1992) stated, "little research has been done regarding the application of student development theories to the field of recreation" (p. 3). This lack of research has hindered those who work in the field of intramural sports. Intramural sport professionals need more information so that they can have a better understanding of their programs' mission(s), objectives, and goals.

Additionally, Ogilvie (1969) indicated that:

The important area of the relationship between participation and the development of important human values has remained a relatively untapped area of serious study. What has athletic competition contributed to the achievement of the various goals that are outlined in almost every philosophy of physical education even written? Do they contribute to increased school morale? Do they contribute identity with the institution? Do they build character? Do they reinforce the highest American values? (p. 175)

Answering questions such as those would be very helpful to the field of intramural sports and to the entirety of a campus recreation department. Studies, such as Geller's (1976) and Murphy's (1985), provided some illumination of these ideas and questions, but few answers have been found. Through their work both Geller and Murphy have assisted with the understanding of student development as a consequence of participation in campus recreation.

The results of this study led to a better understanding of one of Chickering's seven vectors of student development. The results of this study extended the utility of research with the instrument of the Erwin Identity Scale in the area/field of intramural sports. The results may help student services professionals support their students by providing quality atmospheres for their developing students.

Delimitations

The theoretical basis for this study was Chickering's seven vectors of development, specifically the fifth vector of identity, as presented in Education and Identity (1969). This study was delimited to:

- ◊ The developmental theory was related to those undergraduate students between the ages of 18 to 24. Due to the fact that minors could not be researched in this study, all of the students who were under the age of 18 were warned in the initial email contact. If students were over the age of 24 they too were denied the opportunity to participate in the study.
- ◊ This study primarily focused on the development of Chickering's fifth vector: Establishing Identity. This vector is the central vector of the seven and the other vectors build on it.
- ◊ The study did not include sport clubs, extramural programs, and unstructured activities. Only participation in intramural sports was utilized.
- ◊ For the purpose of the study, a random stratified sample of intramural participants was selected from a large university located in the south central part of the United States. Care was taken when generalizing to other institutions. Data were collected during the spring semester of the 2000 academic year.

Limitations

- ◊ One institution in one region of the country was the source of subjects.
- ◊ Sampling problems occurred during the study. The sample size was smaller than anticipated and the reason for this could have been due to the collection procedures. Since the design was limited to email access many students could have not had access to their email, had access during the time the email was sent/till the time the dead line occurred, and those who did not want to participate in the study could have been those participants who needed to be studied to provoke the results.

Definitions

- ◊ Conceptions about body and appearance: Identity includes an accurate self perception and acceptance of one's body and one's appearance. It is an issue of presentation of self. What do I think of my body? How do I conceive of myself and my appearance? An increasing acceptance of one's body particularly in relation to other people is a necessary component. In addition, one's appearance and dress are resolved issues representing a "varied balancing of personal preferences, the desires of other and situation expectations" (Chickering, 1969, p. 83). A person with a high degree of identity exhibits a personal dress style governed by individual tastes rather than the dictates of expectations of other people (Erwin & Delworth, 1980, p. 20).
- ◊ Confidence: Confidence is an assuredness in one's self and in one's capabilities. Confidence includes a conscious self-reliance while recognizing the necessary dependence on outside sources. This recognition is an awareness and faith in one's own capabilities, yet a realization that there are limits to these processes. The confident person has some understanding of his or her own limitations. A self-confident individual feels comfortable about expressing beliefs, making decisions and behaving competently, even though action may not be taken in these areas (Erwin & Delworth, 1980, p. 19).
- ◊ Development through sports: Involvement in sports holds developmental experiences for participants. These experiences are judged to develop social, mental, and physical awareness of self.

- ◊ Human Development: The process in which anything that grows has a ground plan, and out of this ground plan that parts arise, each part having its time to special ascendancy, until all parts have arisen to form a functional whole (Erikson, 1959, p. 52).
- ◊ Identity: A solid sense of self that assumes form as the developmental tasks for competence, emotions, and autonomy are undertaken with some success, and which, as it becomes more firm, provides a framework for interpersonal relationships, purposes, and integrity (Chickering, 1969, p. 80).
- ◊ Intramural Sports: Intramural sports refers to the use of sport events that are planned and organized on a recreational basis for members confined within the walls or jurisdictions of a setting. Intramural sports represents structured sport participation that requires design and external leadership for its provision (Mull, Bayless, & Ross, 1983).
- ◊ Recreational Sport: Programming sport activity for the sake of participation and fun. Recreational sports form four separate programs (informal sport, intramural sport, extramural sport, and club sport), which help represent varying levels of ability and diverse interests in cooperative/competitive activity in the game form.
- ◊ Sexual Identity: A clarification, understanding, and acceptance of one's sexual feelings. The person with a high degree of sexual identity recognizes his or her sexual feelings as natural and normal. There is an absence of guilt because of their presence. Sexual Identity includes not only a positive acceptance of one's sexual feelings but also a control of one's sexual feelings. Sexual feelings are accepted as a normal part of close love relationships. Recognition and acceptance of sexual

feelings does not imply sexual activity or a lack of it (Erwin & Delworth, 1980, p. 20).

- ◊ Sport: Playing cooperative/competitive activity in the game form (Mull, Bayless, & Ross, 1983).
- ◊ Student Development: The way a student grows, progresses, or increases her or his developmental capabilities as a result of attending an institution of higher education (Rodgers, 1990b p. 27).

Research Design and Statistical Analysis

- ◊ This study assessed the identity of student intramural participants and compared the results to normative data of college students using the Erwin Identity Scale (EIS) (Erwin, 1979). Some other comparative instruments which were examined and could have been used included: the Identity Achievement Scale, developed by Simmons (1970) as a modification of Marcia's (1964) Ego Identity Incomplete Sentences Blank; a self-developed scale by Twale (1990), a 28-item, five-point Likert Scale based on Chickering's (1969) Establishing Identity Vector; the Athletic Identity Measurement Scale (Brewer, Van Raalte, & Linder, 1993); and the Student Developmental Task and Lifestyles Inventory (Winston, and Miller, 1987).
- ◊ Data were analyzed in order to test the hypotheses, which were stated in the next section on pp. 13-14.
- ◊ Significance levels of .05 were required for all tests.
- ◊ For the hypotheses 1-9, a one sample T-test was used to observe the differences in the intramural participant to the normed data.

- ◊ As for hypotheses 10-12, a One-way Analysis of Variance was used to compare the differences in the groups mentioned. Each subscale, Confidence, Sexual Identity, and Conceptions About Body and Appearance represented the dependent variables. The independent variables were participation, sex, and housing unit.

Hypotheses

- ◊ Hypothesis 1. There is no significant difference in Confidence, as determined by the Erwin Identity Scale, between the normed data and participants in the intramural sports program.
- ◊ Hypothesis 2. There is no significant difference in Sexual Identity, as determined by the Erwin Identity Scale, between the normed data and participants in the intramural sports program.
- ◊ Hypothesis 3. There is no significant difference in Conception About Body and Appearance, as determined by the Erwin Identity Scale, as measured between the normed data and participants in the intramural sports program.
- ◊ Hypothesis 4. There is no significant difference in Confidence, as determined by the Erwin Identity Scale, between the normed data and male participants in the intramural sports program.
- ◊ Hypothesis 5. There is no significant difference in Sexual Identity, as determined by the Erwin Identity Scale, between the normed data and male participants in the intramural sports program.

- ◊ Hypothesis 6. There is no significant difference in Conception About Body and Appearance, as determined by the Erwin Identity Scale, between the normed data and male participants in the intramural sports program.
- ◊ Hypothesis 7. There is no significant difference in Confidence, as determined by the Erwin Identity Scale, between the normed data and female participants in the intramural sports program.
- ◊ Hypothesis 8. There is no significant difference in Sexual Identity, as determined by the Erwin Identity Scale, between the normed data and female participants in the intramural sports program.
- ◊ Hypothesis 9. There is no significant difference in Conception About Body and Appearance, as determined by the Erwin Identity Scale, between the normed data and female participants in the intramural sports program.
- ◊ Hypothesis 10. There is no significant difference in Confidence as determined by the Erwin Identity Scale, between participants in the intramural sports program living in different housing units (Greek housing, off-campus, residence hall).
- ◊ Hypothesis 11. There is no significant difference in Sexual Identity, as determined by the Erwin Identity Scale, between participants in the intramural sports program living in different housing units (Greek housing, off-campus, residence hall).
- ◊ Hypothesis 12. There is no significant difference in Conception About Body and Appearance, as determined by the Erwin Identity Scale, between participants in the intramural sports program living in different housing units (Greek housing, off-campus, residence hall).

CHAPTER II. REVIEW OF RELATED LITERATURE

This chapter acknowledged the research compiled of human/student development and participation in intramural sports. The main focus of the review focused on Chickering's Education and Identity (1969). The highlights of this review were on the seven vectors of development with a major emphasis on the fifth vector, establishing identity.

Additional topics included other identity theories, other models of student development, and the intramural sports environment. There should be a clear understanding that after an extensive research on the areas of student development and participation in intramural sports that not much literature relationship of the two were found. The only relative literature material was by Todaro (1993).

Student Development

Prior to the writing of Chickering's first edition of Education and Identity (1969), the main goals and objectives of a college/university were to educate, build specific skills, and prepare its students for the working world (Chickering & Reisser, 1993). The colleges in the late 60s and 70s noticed that they needed to use different teaching methods to assist with the overall development of their enrolled students. They perceived that they needed to find other means to help develop their students outside of the classroom. By doing this they had to be very cautious of the roles of the church and parents. It was always perceived that the church and parents were the two entities

through which students developed their character and values (Chickering & Reisser, 1993).

Institutions all around the nation have built specific services to help assist with the overall development of students, not just in the classroom, but also outside of the classroom. Today these services are known as student services or student affairs. Student services are where professionals support students as they enter, enjoy, endure, and exit from college (Delworth, Hanson, & Associates, 1989). From the time a student enters and exits an institution the goal of student services is to assist students growth and to develop to their fullest potential (Delworth, Hanson, & Associates, 1989).

“Knowledge of student development theory enables student affairs professionals to proactively identify and address student needs, design programs, develop policies, and create healthy college environments that encourage positive growth in students” (Evans, Forney, & Guido-DiBrito, 1998, p. 5). Rodgers (1990b) said that student development is the philosophy that has guided student services practice, and it has served as the rationale for specific programs and services since the profession’s inception.

The research of student development can be documented back to the 1937 American Council on Education’s (American Council on Education, 1986) publication of The Student Personnel Point of View. This landmark publication acknowledged the splendid lineage of higher education’s commitment to “the preservation, transmission, and enrichment of the important elements of culture” that is produced in forms of “scholarships, research creative imagination, and human experience” (American Council on Education, 1994, p. 67). The report detailed the concept of asserting the “whole student”. The concept of educating the whole person was enunciated in clear

pronouncements by leading academic administrators around the turn of the century and it endured with unusual consistency.

The use of the term “whole student” was truly defined by Clothier (1986). “In student personnel work we are interested in the individual student’s development, not in any one phase of his program such as scholarship, intellect, leadership, but from the aspect of his whole personality” (Clothier, 1986, p. 15). Since that statement the American Council on Education had used the concept of the “whole student” as their theme or in other words their philosophy thus: “The student personnel point of view encompasses the student as a whole” (American Council on Education, 1986 p. 123).

As the 1970s began, the American College Personnel Association (Miller & Prince, 1976) examined student development in the Tomorrow’s Higher Education Project (T.H.E.) completed in 1968. T.H.E project was invented to explore the viability of student development as a philosophy of the profession (Brown, 1972). It was also intended to examine the student affairs professions’ “commitment to student development; the theories of human development applied to the post-secondary education setting; as a guiding theory, and the continued attempt to ensure that the development of the whole student was an institutional priority” (Garland & Grace, 1993, p. 6). In 1972, when the first edition of T.H.E. was published, the idea was to move student services professionals from the “fringes of higher education to the mainstream of campus life” (Murphy, 1985, p. 15).

Brown (1972) challenged the progress of student development. Brown recognized the new breeds of college students that were enrolled in colleges. He challenged the institutions administrators and student affairs professionals to “hold up the

mirror” to each other and confront the incongruities between the stated goals of higher education and what is happening to students (Evans, Forney, & Guido-DiBrito, 1998). Due to Brown’s different ideas and findings many questions arose, and because of this his work served as a challenge for all of the professionals. The Council of Student Personnel Associations (1994) helped define the roles of the student development specialist and closed the gap between theory and practice in the field.

Because of Brown’s work, new sources of information were established such as the Journal of College Student Personnel, first published in 1975, and in 1976 The Future of Student Affairs which was published due to the efforts of T.H.E. project. Miller and Prince (1976) moved closer to implementation by highlighting the developmental tasks of college students and suggesting program options to help students reach their developmental goals. They also offered much summarizing of Brown’s work along with an agreed definition of student development. In addition to the agreement of the definition, Miller and Prince stated “The mission of the college is to educate the whole student and not only his or her intellect” (Miller & Prince, 1976, p. 169). Through these statements of philosophy, foreign ideas, and early research, student services are able to redefine itself in ways that can help professionals meet the challenges of intentional student growth (Evans, Forney, & Guido-DiBrito, 1998).

Brown (1972) wrote, “There are signs that theory and research are beginning to converge and that in the future those involved in student development will not only understand student development, but also will be able to specify the conditions necessary to promote positive student development” (p. 46). Fourteen years after Brown’s challenging questions and new ideas, Bloland (1985) wrote, “In the real world, student

affairs staff are carrying out their traditional functions and with staff who still are not well schooled in student development or even in higher education... Many entry-level and not a few seasoned professionals know little of student development theory or practice" (p. 1). Bloland expressed concerns and questions about whether the available theories were used to shape the practice (Rodgers, 1989).

It is those exact concerns that Bloland expressed that have formed the model of student affairs today. Today student affairs focus on formal theories that design environments to help college students develop and learn. The criteria of social, cultural, athletic, spiritual, physical, and academic environment as of physical environment should all be followed for development of a student to be possible. Rodgers (1989) stated, "Thus, development is defined by scientific theories rather than by theological or philosophical propositions of the colonial period of our history, and these scientific theories and student affairs practice are linked together" (p. 120). As a result of Rodgers statement, the idea was that the relationship between the two would help with both learning and development outcomes.

Currently, there were at least four kinds of developmental theories that are followed (Evans, Forney, & Guido-DiBrito, 1998). The existing developmental theories are psychosocial theory, cognitive-structural theory, typology theory, and person-environment interaction (Knefelkamp, Widick, & Parker, 1978; and Rodgers, 1980). The psychosocial theory examined an individual's personal and interpersonal life (Evans, 1996). Psychosocial theorists posited that "human development continues throughout the life span and that a basic underlying psychosocial structure guides this development" (Rodgers, 1990b, p. 122). Examples of this research have concentrated on 18-23 year

olds struggling to make decisions in their lives. Often people of this age have trouble determining their identity, who will they love (sexuality and intimacy), and what they will believe (values and lifestyle). Baruch and Barnett (1980) conducted research using this theory. They studied how the number and types of roles in a woman's life may act as moderating variables and how they adapted to life events and resolved adult developmental tasks. The patterns of life roles, which were studied, were; never married, married with children, divorced with children, etc.

The cognitive-structural theory illuminated changes in how people think, rather than what they feel (Evans, 1996). Evans (1996) also stated that cognitive-structural stages are "assumptions people use to adapt to and organize their environments" (p. 173). The most recent examination of the cognitive-structural theorists have been the focus on gender differences (Evans, Forney, & Guido-DiBrito, 1998; Gilligan, 1982; and Kohlberg, 1984). Gilligan and Kohlberg studied, debated, and discussed the relationships between moral reasoning and moral behavior between both genders. The studies concentrated on what moral behavior stages were most suitable for males and females to follow.

Typology theorists "examine individual differences in how people view and relate to the world" (Evans, 1996, p. 179). An example of this is two different people working on a project together with one person having a relaxed approach and another person having a more strict approach. For example, Bob and Jane want to work on a project and Bob always wants to just talk about ideas on how to sell popcorn the fastest and Jane wants to write down the different ways and to sell popcorn with math equations to help prove it with facts.

The final developmental theory was that of the person-environment theory, and it examined not only the student and the institution environment but, even more important, the interaction of the student with the environment (Rodgers, 1990b). An example of this is when students fill out an end of the semester evaluation on a professor. Mostly the students explain how they want the class to change and how the students believe the professor is teaching the material too fast or are too confusing. This is all feedback that the students give of the environment in which they learn (Rodgers, 1990a).

Since 1972, student personnel literature had attempted to demonstrate how student development principles could be applied, in a practical manner, in the various functional areas of traditional student affairs work. Most studies concentrated on student leaders, residence hall life, and other extracurricular involvement. Murphy (1985) believed that "because intramural sports programs have existed in other organizational divisions within higher education, it has been virtually ignored in student development literature" (p. 20).

Throughout much of the research over the entire student development model there has been little work or even any mention of intramural sport as a possible avenue of development. Delworth, Hanson, and Associates (1989), and Evans (1996) discussed a great deal about student development in student services, but none of these discussions mention intramural sports.

Intramural Sports

Intramural sports have served double duty at colleges and universities across the nation. Not only does it provide opportunities for students to develop (Todaro, 1993), it

also provides ways to learn effective use of leisure, as well as, enhancing health and life satisfaction (Caldwell, Smith, & Weissinger, 1993).

Intramurals have traditionally been defined as those activities conducted within a particular institution and in which all participants are members of that institution (Bonanno, 1986). The start of intramural programs can be traced back to the late 1800s. In 1857 at Princeton University, the freshman class organized the Nassau Baseball club and challenged the sophomore class to a game. This is the first recorded intramural activity, and it evolved due to the competition between the two different classes. From that time, it set the standard on how to organize competitive match play. After a few years other colleges and universities started noticing the organized demand for specific types of activities and, therefore, the physical education and athletic departments started organizing specific activities.

In commenting on this time period, Mueller and Reznik (1979) stated, "the programs were a hit or miss because the two more prominent departments of physical exercise, physical education and varsity athletics, were so involved with their own programs that the athletic needs of the masses of students were almost entirely neglected" (p. 13). After a time these departments split up and then started dispersing control elsewhere. In the beginning the athletic department took a large interest in the intramural sports programs for many reasons. The most significant reason was that the students wanted and demanded some form of athletic activity/play. Some other reasons that the athletic departments took such an interest was due to the fact that their varsity athletes could have a competitive team to scrimmage against and it also gave the coach(s) another recruiting tool. The athletic departments did not keep control of the intramural programs

for long. This was due to the misuse of the programming and the fact that someone with better skills needed to control the programs. Because of this, in 1913, the University of Michigan and Ohio State University inaugurated departments of intramural athletics under direction of a faculty member (Mueller & Reznik, 1979). The director was assigned the administrative and supervisory duties for a program of competitive sports that would meet the needs and interests of the student body (Kleindienst & Weston, 1978). From that time forward the campus recreation departments had specific trained professionals programming and defining the needs of their student participants.

As professionals started looking at the demands of the students they started realizing that the activities students wanted were very competitive in nature. Therefore, the need for organized rules, officials, and guidelines began. Once guidelines were introduced, the concept of intramural sports grew and the participation numbers increased. Numbers increased so much that, in 1928, the University of Michigan constructed an athletic facility for the sole purpose of intramural sports (Mueller & Reznik, 1979). Intramural sports were successful on most college/university campuses across the country. After World War II, as after World War I, there was an added momentum to the development of intramural sports. Returning war veterans, who had participated in mass athletics and physical training programs in military services, enrolled in colleges and universities to continue their interests in sports through participation in the intramural programs. This continued to the point where the intramural departments were expanding at a faster rate than any time before in history. The participation numbers in most institutions doubled and tripled. This is the same trend that seems to follow today's participation numbers in most schools as well. It seems obvious that the

demand for participation is present today and the intramural departments are prepared to satisfy that need (Mueller & Reznik, 1979).

In order to understand the trend of increasing intramural participation, it is important for an institution to understand what kind of students participate and exist on their specific campus. Meyer (1999), President of the National Intramural Recreational Sports Association, explains the trend of increasing participation:

We are positioned to engage a major segment of the population in participatory recreational activities. Looking at colleges and universities alone, more than 50 percent of 18-24-year-olds attend higher education, which means that more than 15,000,000 people are attending institutions of higher education. Only about 2 percent of these individuals are able to participate in varsity athletics, while more than 80 percent participate in one or more of our recreational programs on campus. That corresponds to more than 12,000,000 participants in our collegiate recreational programs. (p. N3)

Recreation and relaxation are generally regarded as necessities in today's modern world. Often the mission/vision of a campus recreation department is to provide opportunities for people to enhance their quality of life, their feelings of self-worth, and a satisfaction through leisure pursuits. The physical activity of sport is one of the many dimensions of recreation. Sport provides an intriguing microanalysis for the complex American culture and parallels the recognition of many behavior patterns within society (Edmonson, 1978).

In order to understand the importance of intramural sports, it first must be made clear what motivates students to participate. Cain (1963) conducted a study at the

University of Arkansas, and found that the main reason for participation was due to sheer enjoyment. Cain additionally found that the participants felt that through participation in sport, it allowed for interaction between and/or with new people much easier. At Kansas State University, Edmonson (1975), found from a survey that social values, aesthetic values, health and fitness and pursuit of vertigo were the main reasons for participating in intramural sports.

Loia (1976), from the University of Minnesota, found that women participated in the intramural programs because of the fitness and sociability benefits. At the University of Maryland, Zuercher, Sedlacek, and Master (1982) found that 47% of the students who participated in intramurals participated because it was fun, 23% for physical exercise, 11% for socialization, 6% for competition, and 13% was due to an organization points race. Chesnutt and Haney (1984), from the University of Minnesota, found that the main reasons for participating were "keeping physically fit, releasing or reducing built-up tensions, and giving your mind a rest" (p. 89). A study completed at Texas A&M University, by Miller (1993), found that physical fitness was the main reason for participation. The other three main motivators were "escape from personal social pressures, to be with similar people, and for a sense of achievement/stimulation" (p. 79).

Since the understanding of why students' participant in intramural sports has been observed, the understanding of how intramurals can development the whole student should viewed. Tandy and Joyce (1973) described the three dominant forces that have emerged in the sport society: "an individual search for identity, a search for emotional stimulation, and an attempt for achievement and status" (pp. 19-20). Alderman (1974) revealed the influence of the sport society in the American culture when he stated:

Life is a complex of physical, intellectual, emotional, and social developmental patterns, for a large number of people, especially children, sport and physical activity are integral parts of these patterns. Thus, an understanding of behavior in sport and physical activity will aid us in helping people to better fulfill their lives. (p. 33)

From the previous statements/quotes, a rationalization can be made that sport and active healthy activities play a major role in students' lives today. It is through these leisure activities that the advancement of student development is possible.

Groves (1966) investigated personality changes resulting from intramural participation. He found that five traits showed an increase in favor of the experimental group. The traits were: 1) analytic thinking; 2) sociability; 3) confidence; 4) personal relations; and 5) home satisfaction. In addition to Grove's research, Fletcher (1971) reported:

... significant but very small correlations for 6 of 15 personality traits and intramural participation. The traits showing slight negative relations to intramural participation were Achievement and Autonomy; small positive correlations with intramural participation were Order, Affiliation, Dominance, and Heterosexuality. (p. 242)

Some other researchers such as Bayless, Mull and Geller (1977) noted several other potential areas for individual development through intramural sports participation.

The first of these relates to development through cooperative efforts. Within the time leading to, during, and after participation, teams and individuals have to cooperate in order to even approach satisfactory participation. The need for such

cooperative efforts can be utilized to reinforce positive behavior patterns of participants. Secondly, in an intramural sport game situation, winning and losing is also something the participant must adjust to. How this adjustment occurs becomes developmental in nature. Thirdly, in a participation situation, individuals are confronted with the competitive element of sports. Often, this competition leads to emotional states that cause the individual either to maintain or possibly lose control of his/her emotions. Control, however, can be learned by applying the force of behavior standards of the game and of societal mores. Fourthly, the player-participant has a natural tendency toward aggression, as do all human beings. The learning process involved in controlling aggressiveness in a sport situation is developmental in itself. Sports also provide opportunities for developing positive interpersonal relationships or interaction between individuals and groups, two other important elements of life. (p. 20-22)

Furthermore a study conducted by Fletcher (1971), examined the correlations of Edward's Personal Preference Schedule personality traits of intramural sports participation. The results indicated a significant, but very small correlation for 6 of 15 personality traits and intramural sports participation. The traits showed a slight negative relation to participation were "Achievement and Autonomy; small positive correlations with intramural participation were Order, Affiliation, Dominance, and Heterosexuality" (p. 242).

Geller (1976) conducted research on student development in intramural sports and he indicated that:

On the basis of Chickering's theory and other supporting evidence, the student participating in the administration of the intramural sports program does have significant opportunities for developing each of the Chickering vectors. It is also evident that some of the administrative functions for which students can be responsible also can have a developmental impact. (p. 198)

Hood, Riahiinejad, and White (1986) studied the changes in ego identity during the college years. They found that "...involvement in campus groups and recreational activities was related to growth on the confidence subscale. This finding suggests the importance of involvement in campus activities and indicates that much of this development happens during the last 3 years of college" (p. 113). These researchers proposed:

Ample opportunities for students to become involved in such activities must be provided during these years. Because most of the growth in identity occurred between the sophomore and senior years, educators must give attention to the various aspects of identity during these years so that students may have a greater sense of self when they graduate from college. In this way, graduates may be better prepared to face the various life commitments that will confront them in later adulthood. (p. 113)

Williams and Winston (1985) conducted research on participation in organized student activities using the Student Development Task Inventory. Their research was directed to the growth of a student on a Confidence subscale. Their results indicated that "students who participated in organized student activities and organizations showed

statistically greater development task achievement in the areas of interdependence, educational plans, and lifestyle plans than did students who did not participate" (p. 56).

Williams and Winston (1985) also concluded:

Students who do not elect to become involved outside the classroom in either organized student activities or work are developmentally less mature than participants. Based on this conclusion, colleges are justified in continuing to support organized student activities, as they traditionally have, and they should consider strategies for more strongly (possibly even requiring) participation in student organizations. Such participation seems to be an effective means of stimulating personal development. (p. 58)

Abrahamowicz (1988) helped support the importance of being involved in student activities. He discovered that "participation in student organizations seems to lead to greater involvement in the overall college experience. Involvement of this nature and to this extent is likely to result in a higher quality educational experience" (p. 237).

Furthermore, Abrahamowicz (1988) stated:

Not only do student organizations and related activities provide educational and developmental benefits generally unattainable in the classroom, there is evidence to indicate that they may be important factors in involving students with their colleges in a way that enhances retention. For professionals in student services, such knowledge more firmly places them in the mainstream of higher education. (p. 237)

Through these authors' research, the developmental differences between the involved and non-involved student is clearly found and stated. The majority of the

authors previously mentioned, in some form or another, recommended that institutions find ways in which to get students involved. "By actively finding ways to get students involved, the institution will hopefully be increasing their impact on the development of the individual" (Nesbitt, 1993a, p. 22). It is those students who get involved that seem to experience the greater opportunities for growth and development.

Many other studies have been completed which help support that student involvement assists with the overall development of a student. These studies include Wayne (1990), Hebert (1990), Fitch (1991), Smith (1991), and Thrasher and Bloland (1989). Each of these studies stated specific cases and examples of what aspects are developed by being involved with extracurricular activities while in a college or university. The activities mentioned are similar to intramural sports because they are governed by student services and get students involved outside of the classroom. Astin (1993) reported that participation in intramural sports was positively related to satisfaction with the overall college experience and leadership development.

In addition, Todaro (1993) outlined the seven vectors of Chickering's model and related the impact that intramural/recreational sports had for each of the vectors. According to Todaro (1993), participation in intramural sports provided opportunities for students to interact with others either as teammates or as opponents. Students were able to develop along Chickering's first vector "achieving competence" by enhancement of self-esteem through positive participation experiences and recognition of individual participation. In addition, students had the opportunity to master skills and rules; develop skill transfer abilities; and increase physical fitness through intramural sports participation. The opportunity to enhance interpersonal competence through social

interaction and cooperative experiences with others allowed the students to develop along several of Chickering's vectors: achieving competence, achieving autonomy and developing interpersonal relationships.

Participation in intramural sports enhanced the "managing emotions" vector by giving the students an appropriate outlet for expressing emotions as well as providing an environment in which the students can experiment with new ways to express emotions. Learning to interact with members of the opposite sex and developing relevant attitudes and behaviors was also an important result of intramural participation (Todaro, 1993).

Learning to adhere to a set of parameters allowed the students an opportunity to learn to manage their emotions as well as accept the responsibility of not following rules. Following an established set of rules and interacting with others enhanced their ability to tolerate differences in behavior and viewpoints of others and compare these differences to the student's own values and beliefs (Todaro, 1993).

While it is possible to see how participation in intramural sports may affect the development of students, there is still concern among college administrators and faculty about the appropriate use of leisure by college students (Caldwell, Smith, & Weissinger, 1993). Providing students with an opportunity to develop as a whole individual in their leisure time teaches them the importance of engaging in positive use of their leisure. Participation in lifelong activities will aid students in establishing a lifestyle that is wellness oriented and is a positive outlet for developing as an adult.

Chickering's Theory

As mentioned in the introduction, Schuh (1994) speculated that over the past 25 years, Chickering's Education and Identity (1969) had generated as much research as any other work in the field of student development. Chickering had created many popular theories, models and views on how higher education which should be approached and valued. Due to the practical approach Chickering had taken, his theory was easy to understand and use. As a result, he had become perhaps the most highly regarded student development theorist to date (Evans, Forney, & Guido-DiBrito, 1998). The theory is based on research Chickering conducted between 1959 and 1965 while he was employed at Goddard College (Thomas & Chickering, 1984). He began writing Education and Identity in 1963 in an attempt to provide a conceptual framework for his findings as well as other research that had been conducted on college students (Evans, Forney, & Guido-DiBrito, 1998). In developing his book, Chickering based much of his theories on earlier work completed by Erikson (1959) and White (1959). Most importantly Erickson's work provided the foundation with his three domains of individual development. These domains were the person's physical stage, his/her encounter with society and the social roles played, and the internal ordering of those experiences (Chickering, 1969).

From these growth stages, Chickering developed his own sequence of life skills through the seven vectors of development. He labeled them vectors "because each seems to have direction and magnitude-even though direction may be expressed more appropriately by a spiral or by steps than by a straight line" (Chickering, 1969, p. 8). The seven vectors are: 1) developing competence; 2) managing emotions; 3) moving through

autonomy toward interdependence; 4) developing mature interpersonal relationships; 5) establishing identity; 6) developing purpose, and; 7) developing integrity (Chickering & Reisser, 1993).

The focus of this study was on the vector of establishing identity, therefore, it received a more detailed review. Chickering believed it was the most vital vector. Geller (1976), Murphy (1985), and Nesbitt (1993a) all completed studies that attempted to find links between each vector and participation in sport activities. A similar approach was also taken in this study, but with more recent literature.

Throughout past years many interviews have been conducted with Chickering (Garfield & David, 1986; Krivoski & Nicholson, 1989; and Thomas & Chickering, 1984). Within these interviews Chickering discussed areas, which he wanted to adjust in a later revised edition of his book Education & Identity (1969). The areas mentioned were:

- 1) to incorporate findings from recent research on gender, race, and national origin; 2) to acknowledge the greater range of options students now have; 3) to adjust the theory to fit adult learners as well as traditional-aged students; and, 4) to alter the definitions of several of the vectors to reflect changes in societal conditions and to acknowledge the work of other theorists. (Evans, Forney, & Guido-DiBrito, 1998, p. 37)

From those interviews, Chickering, with the assistance of Linda Reisser, had revised his book (Chickering & Reisser, 1993) to focus on the above stated areas.

The Seven Vectors

The concepts that were very important to this study and that must be understood are the seven vectors of social-emotional development, proposed by Chickering (1969).

He indicated that:

The major constellation of development during adolescence and early adulthood have been variously formulated as 'growth trends', 'developmental tasks', 'stages of development', 'needs and problem areas', or 'student typologies'. These different formulations accompany differences in point of departure, in seven major areas: competence, emotions, autonomy, interpersonal relationships, purpose, identity, and integrity, each of which has its major components. They are called vectors of development because each seems to have direction and magnitude- even though the direction may be expressed more appropriately by a spiral or by steps than by a straight-line. (p. 8)

These vectors served as the basis for Chickering's theory on the development of the young adult. He called these vectors "major highways for journeying toward individuation" (Chickering & Reisser, 1993, p. 35). "Chickering noted that students move through these vectors at different rates, that vectors can interact with each other, and that students often find themselves reexamining issues associated with vectors they had previously worked through" (Evans, Forney, & Guido-DiBrito, 1998, p. 38). Therefore, it is important to understand that the vectors do build on each other. More importantly, for the purpose of this study, it is crucial to understand the seven vectors and how they relate to the development of the campus recreation participants. Throughout

the rest of this chapter the seven vectors were discussed, some being followed by a brief description how it is related towards recreation.

Competence

The first of the seven vectors is that of competence. Chickering (1969) stated that:

Competence is a three-tined pitchfork. One tine is intellectual competence; most educational institutions are devoted to fostering or forcing this kind of development. Another tine is physical and manual skills: this kind of development is a concern to many noncollege young persons, and, because of the prestige and recreational value of athletic skills or because of the creative value of arts and crafts, to some college students as well. The third tine is social and interpersonal competence; this kind of development is the one of greatest concern to the young adult and one where significant development frequently occurs without explicit support from family, employer, or college. But the most important part of the pitchfork is the handle. Without a handle you can't pitch much hay even if the tines are sound; and the handle is the sense of competence, the confidence one has in his ability to cope with what comes and to achieve successfully what he sets out to do. (p. 9)

In lay terms, intellectual competence involves acquisition of knowledge and skills related to particular subject matter, development of "intellectual, cultural, and aesthetic sophistication" (Reisser, 1995, p. 506), and increased skill in areas such as critical thinking and reasoning ability. Physical competence comes through athletic and recreational activities, attention to wellness, and involvement in artistic and manual

activities. Interpersonal competence includes skills in communication, leadership, and working effectively with others.

Murphy (1985) indicated, "Intramural sports do provide students with the opportunity to interact. They can observe others' reactions to their interaction in the sports environment. They can experiment with different means and styles of interaction and receive feedback on its appropriateness" (p. 33). Martens (1975) stated that there is a positive relationship between physical activity and interpersonal competence but no causal generalizations can be made. Chickering (1969) stated that the sports arena is an area in "which the sense of competence can be significantly fostered" (p. 29).

Since the time of that statement Chickering had realized that little research exists on the development of physical or manual skills or on the developmental consequences of participation in such activities. Chickering stated, "Perhaps the development is so obvious when one learns to shoot baskets, jump hurdles, play rhapsodies, dance, sail, somersault, design, sculpt, or photograph that systematic observation seems superfluous" (Chickering & Reisser, 1993, p. 63). Winter, McClelland, and Stewart (1981) found that gains in critical thinking were positively correlated with intercollegiate athletic participation. Through their research they found that the same qualities needed for success in athletics could enhance a persons intellectual abilities. Chickering and Reisser (1993) mentioned, "Participation in intercollegiate and intramural athletics also can foster increased awareness of emotions and increased ability to manage them" (p. 66). Chickering and Reisser (1993) also stated, "In most colleges, learning is more passive than active. Thus, most colleges need a counterbalancing commitment to encouraging

athletic and artistic participation, promoting wellness and healthy living, and balancing mental overload with hands-on learning" (p. 72).

Once a person can develop a sense of competence in their lives they are able to grow as a person. This is a very important part of a student's life in college. Without this step in the growth process a person will never be able to reach some of the final vectors, such as self-concept and identity.

Managing Emotions

The second vector that Chickering explains is managing emotions. Chickering (1969) stated:

... the students first task is to become aware of feelings and to trust them more, to recognize that they provide information relevant to contemplated behavior or to decisions about future plans. Before emotional control can become effective, emotions have to be experienced, to be felt and perceived for what they are; biological forces provoke sexual desire. Contact with a broadened life space provokes hostility towards parents and toward more generalized authority. Until lust and hate are admitted as legitimate emotions, as legitimate as love and admiration, their motive power is not likely to be harnessed to productive ends. Further, problems of control are aggravated because such feelings as lust and hate may be expressed in unrecognized way or with unexpected intensity, triggering unanticipated consequences. (pp. 10-11)

Through Geller's (1976) and Murphy's (1985) research several studies were found which linked sporting opportunities to the control of aggression. Husman (1969) stated that sports actually teach aggression and cause frustration. Layman (1970)

concluded that sports provided a means for expressing aggression in a controlled manner, which is socially acceptable. He also added that if institutions put a greater emphasis on intramural sports programs rather than intercollegiate athletics it would enable more students to learn to control aggression. Harris (1973) concurred with the idea that sports provoked emotions like aggression.

McNeil (1992) stated "Competitive sports may be one of only a few activities serving as a social institution where aggression and controlled violence are integral parts of the contest. Thus, aggression in varying degrees is acknowledged, understood, and, to a certain degree, accepted in the structure of the playing field (p. 4). "In contrast to aggression is assertive behavior, which is tolerated, condoned, and valued in many social contests" (Pargman, 1998, p. 158).

Understanding this definition is important for students to grow into mature adults, and by controlling these emotions it allows them to make intelligent decisions which allows them to achieve their goals. Managing emotions, and 'becoming one's own person,' leads to the next vector.

Autonomy

The next vector is the fulfillment of autonomy. Chickering (1969) pronounced that:

Recognition and acceptance of interdependence is the capstone of autonomy. One realizes that parents cannot be dispersed with except at the price of continuing pain for all; that he cannot receive the benefits of a social structure without contributing to it; that loving and being loved are necessarily complementary.

Then as interdependence is recognized and accepted, boundaries of personal choice become more clear. (pp. 12-13)

It is important for a person to form his/her own identity, but it is wrong for a person to isolate one's self from others while achieving an identity. "Being able to recognize and accept the importance of interdependence is a major step in achieving autonomy" (Nesbitt, 1993a, p. 12). Little research was found linking autonomy to intramural sports. Geller (1976) indicated that there are little opportunities for a intramural participant to development autonomy. Groves (1966) indicated that intramural sports participation can be a factor in developing interdependence.

Interpersonal Relationships

The next vector is interpersonal relationships, and Chickering (1969) states it as:

This aspect of development is different from interpersonal competence. That involved learning to manage one's self and others to accomplish tasks requiring joint effort; this involves developing tolerance for a wide range of persons.

Tolerance means not only to 'put up with', but also not to be upset by dosages that earlier caused distress. Ideally, this tolerance develops not through increased resistance and immunization, but through increased capacity to respond to persons in their own right rather than as stereotypes or transference objects calling for particular conventions. (p. 15)

This vector forms as a very maturing part of a students' development. Students are able to learn from their own mistakes and other persons' mistakes as well. The other key point of this vector is the tolerance for other people. Through this tolerance it too allows them to grow by just observing and putting up with non-personal affairs.

Very little research was found that linked intramural sports to participants' interpersonal relationships. Through Geller's (1976) and Murphy's (1985) research only rationalizations were made to link the two together. Husman (1969) was the only piece of research that seemed helpful. Through Husman's research it was made clear that there was a relationship in that participation in sports might help one to develop interpersonal relationships.

Sense of Purpose

Chickering (1969) explains the sixth vector of sense of purpose as:

The dilemma is not just "Who am I?" but "Who am I going to be?"; not just "Where am I?" but "Where am I going?" Development of purpose occurs as these questions are answered with increasing clarity and conviction in three domains: avocational and recreational interests, vocational plans and aspirations, and general lifestyle considerations. Development of purpose, then, requires formulating plans and priorities that integrate avocational and recreational interests, vocational plans, and life-style considerations. With such integration, life flows with direction and musing. (pp. 15-16)

"Developing purpose entails an increasing ability to be intentional, to assess interests and options, to clarify goals, to make plans, and to persist despite obstacles" (Chickering & Reisser, 1993, p. 209). The only clear relation that can be made between involvement in intramural sports and developing purpose is by making it one's career. If a student's major is sports management, recreation, leisure service management or physical education then the experience that one receives through intramural sports could be very beneficial. A person could develop a career through being involved with campus

recreation. Involvement in intramural sports could enhance the interests of the students.

Geller (1976) helps support this concept.

Integrity

Chickering (1969) identifies integrity such as:

Closely related to the development of purpose and identity is the development of integrity, the clarification of a personally valid set of beliefs that have some internal consistency and that provide at least a tentative guide for behavior. Such development involves three overlapping stages: the humanizing of values, the personalizing of values, and the development of congruence. (p. 17)

Without the development of integrity, a person is without a set of guidelines to lead them in the correct direction in our function of society. When students come to college they bring with them a special set of beliefs, which has been learned throughout their childhood. When they are in college they start to change these beliefs. They start to look around them to see what others are doing. How other people look, how they study, and how they play are all-important values that college students try to learn and understand. Once again through an intense research search no empirical research was found to which helped relate the development of integrity to sports. Only assumptions can be made to those related studies such as studies relating self-esteem to a degree of satisfaction in sports.

Establishing Identity

Each year new students enroll in college and each year all students seem to have the same thing in common. Twale (1990) stated, "They are encountering a new culture and entering a new life phase. To a greater or lesser extent these students have embarked

upon a journey in search of self" (p. 304). Douvan and Adelson (1966) explained college as a place where one conducts that search for one's personal identity, and begins to resolve the 'who am I question'. Bloom and Marion (1988) described the college setting as a place for the discovery of self.

Although many theorists and researchers have agreed that the college years are an important developmental time, there is disagreement on the stages and specifics of identity development. Some theorists take a psychosocial developmental approach and are interested in individual growth and change (Erikson, 1968; Chickering, 1969; Chickering & Reisser, 1993; and Marcia, 1966). These theorists focus on the internal-psychological changes and characteristics. Other theorists take a cognitive-structural approach focusing on thought processes, reasoning, and structures individuals create for understanding (Pascarella & Terenzini, 1991). Another group of theorists uses the college impact model to explain identity development. These models center on environmental variables that influence developmental change (Pascarella & Terenzini, 1991). Change is therefore not just within the individual as the psychosocial and cognitive-structural models propose, but also a function of the environment (i.e. size of the institution). Hence, the environment at college may also be an important component of identity development. By providing experiences which confront and challenge students' ways of thinking and behaving, colleges can aid the identity development process.

Eric Erickson (1950, and 1968) has been given the major distinction for advancing the psychological theory of identity. Erickson had characterized identity in the following ways: as an affective state or condition; as a process; as a function; as a quality

of structure; as a goal and also as the drive toward that goal; and, as an agent (Thayer, 1963). Somatic, personal, and social are the three categories in which Erickson's theory lie (Erickson, 1968, p. 289). Since Erickson's early work two other writers have refined the concept of identity. Marcia (1966) focused his view of identity upon Erickson's emphasis on social roles, particularly ideological and occupational roles. More specifically Marcia emphasized his work to the sociological aspect of identity in which the person establishes a reciprocal relationship with society.

Establishing identity is understood as the natural process of maturity and psychosocial development among college students. Whereas Marcia saw identity as an external process of choosing one's social roles in the world, Chickering saw identity as an internal process of relating to oneself and the world. Understanding identity then leads to the largest and most pivotal vector in Chickering's developmental theories is that of identity. Chickering placed development of identity in the middle of his seven development vectors. He believed that identity is dependent on the three preceding vectors of competence, emotions, and autonomy and is a springboard for fostering change in the three subsequent vectors of interpersonal relationships, developing purpose, and integrity. For this reason, identity is the most significant vector of the seven and this is why it is the main focus of this study.

Chickering (1969) indicated:

Development of identity depends in part upon the other vectors already mentioned: competence, emotion, and autonomy. But it is more than simple the aggregate of change in these other areas... development of identity involves clarification of conceptions concerning physical needs, characteristics, and

personal appearances, and clarification of sexual identification, of sex-appropriate roles and behavior. (pp. 13-14)

Chickering postulated that identity had three components: 1) comfort with body and appearance; 2) comfort with sexual feelings (lust & hate) and; 3) and an underlying confidence in the self. Erwin (1979) suggested that personal confidence is a third component of identity. He maintained that although Chickering did not directly mention personal confidence when he quoted Erickson's idea about inner capital and accrued confidence, he implied that self-assurance was a necessary component of identity.

Since 1969, Chickering has modified his definition of identity. In the (second edition) of Education and Identity, Chickering and Reisser (1993) define identity as:

1) comfort with body and appearance; 2) comfort with gender and sexual orientation; 3) clarification of self in a social, historical, and cultural context; 4) clarification of self-concept through roles and life-styles; 5) sense of self in response to feedback from valued others; 6) self-acceptance and self-esteem; and 7) personal stability and integration. (p. 49)

Murphy (1985) stated:

In their treatment of Erickson's work, Knefelkamp, Widick, and Parker (1978) indicated that the process of developing that sense of identity is facilitated by experiences which help the individual clarify interests and skills and experiences which aid the individual in making commitments. It seems that sports participation could be a factor in helping to complete a total picture for an individual. (pp. 45-46)

Weston and Stein (1977) studied the relationship of the identity achievement of college women and campus participation. From this study, Weston and Stein believed that "Participation in campus activities and general involvement in college experiences can provide opportunities for women to test their various abilities, interests, and preferences. This participation coupled with leadership functions for some, can help build a sense of individual identity" (p. 21). Through their research they found that participation in college activities, such as campus recreational activities was related to the identity of the female college student. In addition, they found through their study that there was no related factors found between housing and classification to identity.

Hood, Riahiinejad, and White (1986) examined the development of undergraduate college students along Chickering's (1969) vector of identity during their four years on a university campus. The students who participated in their research were asked to respond to a questionnaire that compiled information about housing, extra-curricular activities, social life, and commitment. From the gathered information they found no differences between living arrangements, their urban or rural living backgrounds, and their varying work experiences. In addition the items dealing with commitment to career, religion, politics, and life-style did not reveal any significant relationships with the score recorded from the Erwin Identity Scale. On the other hand the research did show that involvement in campus activities did have a positive relation to identity development. More specifically those students who were found to participate in recreational activities had significantly higher scores as seniors on all three sub-scales.

The actual forming of an identity is important to fulfill the final segments of the seven vectors. As a person starts to grow through these vectors, they start to formulate

ideas about where they want to go, and what they want to do with their lives. This in turn gives the students their own sense of identity. Clarke and Kleine (1984) define identity as a "well developed system of values, an ideology of some vocational goals" (p. 1).

Throughout Chickering's seven vectors it is very clear to see that they are very important to the development of a student. Through the descriptions of these vectors one can hypothesize that with involvement in intramural sports would give students the opportunity to reach each of these seven vectors. Each of the seven vectors is needed to become a complete student.

In general terms, Kelly (1983, and 1996) argues that identity development is an integral part of leisure experiences, that "in the relative freedom of leisure, we take first steps toward selfhood" (Kelly, 1996, p. 43). Identity formation may be fostered through participation in leisure activities, while it must be noted that some activities are more developmentally beneficial than others (Shaw, Kleiber, & Caldwell, 1995). It would seem logical that identity development among those specific activities would include intramural sports.

Summary of Literature Review

It is vitally important that all students have a wide range of learning opportunities as they enter an institutional setting. There are many forms of education outside the classroom, which allow students to develop. A program, which can assist with student development, is that of the campus recreation programs, more specifically the intramural sports programs. Since colleges are now recognizing that student life is as important as

that of the academic environment, it is crucial to know how out of class experiences affect students.

Milton (1992) indicated that research is needed in this area because, "As more and more colleges place recreational sports departments under the administrative auspice of Student Affairs, Student Services, Student Life, etc., the need becomes apparent for linking programs with student development theory" (p. 3). As the money gets increasingly harder to generate in the coming years, recreational sports professionals will need even greater justification for program expenditures. Proof of student development will be that justification. To help prove these developments quantitative research in this field/area must continue. They must continue so that professionals in this field can start using facts and not beliefs (Nesbitt, 1993b). Through both intramural sports and sport clubs it is evident that student development is possible (Nesbitt, 1993a). These programs can hopefully continue to grow so that someday they can act as a specific set-model of a form of student higher education development.

CHAPTER III. METHODOLOGY

This study assessed the identity of student intramural participants and compared the results to normative data of college students using the Erwin Identity Scale (EIS) (Erwin, 1979). This chapter will present the following topics: design of the study, preliminary procedures, data collection procedures, definition of the sample, instrumentation, operational procedures, data collection, scoring procedures, and analysis of the data.

Design

- ◊ This study assessed the identity of student intramural participants and compared the results to normative data of college students using the Erwin Identity Scale (EIS) (Erwin, 1979). Some other comparative instruments which were examined and could have been used included: the Identity Achievement Scale, developed by Simmons (1970) as a modification of Marcia's (1964) Ego Identity Incomplete Sentences Blank; a self-developed scale by Twale (1990), a 28-item, five-point Likert Scale based on Chickering's (1969) Establishing Identity Vector; the Athletic Identity Measurement Scale (Brewer, Van Raalte, & Linder, 1993); and the Student Developmental Task and Lifestyles Inventory (Winston, and Miller, 1987).

Definition of the Sample and Procedures

- ◊ The sample used in the study consisted of student participants involved with intramural sports, aged 18-24.
- ◊ That sample was contacted via email.

- ◊ The intramural student sample was selected during the spring 2000 semester, from a large university located in the south central part of the United States.
- ◊ The stratified random sample of 1000 students were selected from the Intramural roster/sign-in sheets from the 1999-2000 school year. The roster/sign-in sheets were obtained from the Intramural Sports Department of a large university located in the south central part of the United States. The estimated 1000 students were selected from three separate groups (Greek teams, residence hall teams, and off-campus teams). The groups represented rosters from three different intramural sports. The intramural flag football season (fall semester, 1999), the basketball season (spring semester, 2000), and the softball season (spring semester, 2000) were the three sports where the rosters were selected.
- ◊ At this university there was not an equal representation of the three groups, which were to be studied. The groups were broken down into total participation by percentages. For this study the percentages were as followed: Greek teams accounted for 40% of total participants; Residence hall teams accounted for 20% of total participants; and Off-campus teams accounted for the final 40% of total participants. Within each group, the selection of male to female participants was selected to signify the percentage of each as well. The males were represented at 75% of total population and, therefore, the females were 25%. From these percentages the selections were made. Due to the different representations of the groups the sample was considered a stratified random sample.
- ◊ The comparison group statistics came from the normative data established by the Erwin Identity Scale (see Appendix E).

Instrumentation

Students selected to participate in the study were asked to complete the 59-item Erwin Identity Scale (EIS) (see Appendix A). The instrument, which was developed at the University of Iowa, was based upon Chickering's original definitions of the seven vectors. The instrument was designed to measure the (original) three main concepts comprising Identity: Confidence, Sexual Identity, and Conception About Body and Appearance (Erwin & Delworth, 1980). The instrument was evaluated for construct validity and reliability. Total scale reliability was .91 (Hood, 1986) and the reliability coefficients for the three subscales were as followed: Confidence .81, Sexual Identity .75, Conceptions About Body and Appearance .79 (Erwin & Delworth, 1980). Convergent validity studies (Erwin & Schmidt, 1982) have found moderate correlations between Confidence and Sexual Identity and other measures of related concepts (see pp. 10-11 of Chapter I for complete definitions of the three subscales). Longitudinal studies (Erwin, 1982; and Erwin & Kelly, 1985) have demonstrated that scores increase on the Confidence scale throughout the first year of college and from the first year to the senior year.

The EIS has been used in a number of different studies related to developing identity of college students. Reports on the results of these studies and the validation of the instrument have been published. They include Erwin (1979), Erwin (1982), Erwin (1983), Erwin and Delworth (1980), and Erwin and Schmidt (1982). Erwin granted permission for the EIS to be used in this study (see Appendix B). Since the development of the first edition of the EIS there has been a revised edition completed by Sebrell

(1997). This revised edition had included the new information that Chickering has added to his (Second Edition) of Education and Identity. Both Erwin and Sebrell had recommended that the revised edition not be used until more validity tests have been completed.

Operational Procedures

- ◊ The sample was stratified from three different sports rosters/sign-in sheets, which had been on record for the school year of 1999-2000. The rosters/sign-in sheets from Flag Football 1999 season, Basketball 2000 season, and Softball 2000 season.
- ◊ The rosters/sign-in sheets from each sport were separated into three separate piles/groups. The three separated groups were designated Greek Housing, Off-Campus, Residence Hall. Each group will be represented by a percentage. Within each group the female to male ratio of participants will be 1:4. This ratio was characteristic of the specific university. From these groups of separated rosters/sign-in sheets, the proper percentage of names from each rosters/sign-in sheet were selected to be placed into the pool of estimated 1000 students.
- ◊ Three separate groups of students each were sent an email explaining the study and purpose (see Appendix C). Included in the email message were three separate dates and times for the participants to attend a lecture room to complete the Erwin Identity Scale questionnaire. Through the email message it was made clear that the students would have to sign a consent form (see Appendix D) in order to complete the questionnaire. At the time the students signed the consent form, they received a code number, and this code number was used for identification purposes throughout the remainder of the data collection process. Also during this time the students were

made aware that they could not participate in filling out the questionnaire unless they fit into the age range of 18-24. The final step to the email process was to ask the participant to forward the researcher a replied message stating if interested or not and what section/exam time they would be attending.

Data Collection Procedures

- ◊ The emails of the initial information were sent to each of the students selected through the stratified random selection process on April 24, 2000 (see Appendix C).
- ◊ Upon arrival of the email, each participant received an explanation about the research process at this time and it was made clear of the deadline for participation, May 3, 2000.
- ◊ The dates for the exams were as followed Thursday, April 27, 2000, at 7:00PM; Saturday, April 29, 2000, at 2:00PM; and Monday, May 1, 2000, at 3:00PM. All exams were held at the Wellness Center Auditorium.
- ◊ The Erwin Identity Scale was administered to 20-40 participants per single session. During the survey, respondents were asked to indicate their gender (male/female), their primary living arrangement during the time period (Greek housing, off-campus, residence hall), and the school classification (Freshman, Sophomore, Junior, Senior) (see Score Sheet included in Appendix A).
- ◊ A total of 101 questionnaires were completed and returned in usable form representing a 10% response rate. A total of 70 males and 31 females completed the questionnaire. The responses collected resembled the initial selection of participants (see Sampling Procedures, pp.48-49)

Scoring Procedures

- ◊ The data were scored using the means of the EIS scoring key, which was designed when the EIS was copyrighted in 1977 (see Appendix B). A clear transparent (overlay) was created by the researcher, which was used to help complete the scoring system more efficiently.
- ◊ Once this data was analyzed through the scoring system, it was then prepared to be placed into the SPSS computer version (SPSS). Through the use of this computer program individual items were compared and combined to form the three subscales of Confidence, Sexual Identity, and Conceptions About Body and Appearance.
- ◊ During this time demographic data were analyzed. This information was useful on making comparisons between the groups identified in the hypotheses.

Analyses of Data

- ◊ Data were analyzed in order to test the hypotheses, which were stated earlier in Chapter One (pp. 13-14).
- ◊ Significance levels of .05 were required for all tests.
- ◊ For the hypotheses 1-9 a one sample t-test was used to observe the differences in the intramural participant to the normed data.
- ◊ As for hypotheses 10-12 a One-way Analysis of Variance (ANOVA) was used to compare the differences in the groups mentioned. Three different subscales, Confidence, Sexual Identity, and Conceptions About Body and Appearance,

represented the dependent variables. The independent variables were intramural sports participation, sex, and housing unit.

CHAPTER IV. RESULTS AND DISCUSSION

This study assessed the identity of student intramural participants and compared the results to normative data of college students using the Erwin Identity Scale (EIS) (Erwin, 1979). The statistical analysis of the primary research is reported in this chapter. A significance level of .05 was required for all tests. A series of one sample T-tests were computed for the hypotheses 1-9. For hypotheses 10-12, a Oneway Analysis of Variance was computed to compare the differences in residence groups.

Characteristics of Subjects

Stratified random samples of approximately 1000 students were selected from a large south central university's Intramural Sports Department's roster/sign-in sheets. The individuals were contacted via email and invited to attend one the testing sessions. At that time consent forms, demographics information sheets, and the Erwin Identity Scale questionnaire was completed. A total of 101 questionnaires were completed and returned in usable form representing a 10% response rate. A total of 70 males and 31 females completed the questionnaire. Out of these participants there were 31 Greek participants, 29 Residence Hall participants, and 41 Off-campus participants. These numbers were representative of the overall participation patterns of the three separate groups in the University's Intramural Department. In addition to the needed information, there were 26 freshman, 16 sophomores, 23 juniors, and 36 seniors represented in the research process.

Results

One sample t-tests were used to test hypotheses 1-9. The t-tests are used to compare means from two separate groups. The purpose of the t-test was to help decide whether the sample mean was drawn from a hypothesized population with a specified mean or whether it was drawn from some other population with a different mean.

Table 1.

One Sample t-tests using intramural participant results and normed data for all subjects.

<u>Variable</u>	Number of Cases	df	Standard Dev.	t-Value
<u>CONFIDENCE</u>	101	100	15.63	3.80
	Mean	Normed Data Value	Mean Difference	2-Tail Sig.
	93.6	87.7	5.90	.000

Hypothesis 1

There is no significant difference in Confidence, as determined by the Erwin Identity Scale, between the normed data and participants in the intramural sports program.

There was significant difference found to exist between the sample mean versus the mean of the population regarding the Confidence subscale. By looking at the mean scores a real difference in the mean scores of must be observed. In using the one sample t-test procedure a 2-tail significance score of .000 was obtained ($p < .05$) (see Table 1). Therefore, the hypothesis is rejected as stated.

Table 2.

One Sample t-tests using intramural participant results and normed data for all subjects.

<u>Variable</u>	Number of Cases	df	Standard Dev.	t-Value
<u>SEXUAL IDENTITY</u>	101	100	10.85	1.95
	Mean	Normed Data Value	Mean Difference	2-Tail Sig.
	67.5	65.4	2.1	.054

Hypothesis 2

There is no significant difference in Sexual Identity, as determined by the Erwin Identity Scale, between the normed data and participants in the intramural sports program.

There was no significant difference found to exist between the sample mean versus the mean of the population regarding the Sexual Identity subscale. In using the one sample t-test procedure a 2-tail significance score of .054 was obtained ($p > .05$) (see Table 2). Therefore, the hypothesis is not rejected as stated.

Table 3.

One Sample t-tests using intramural participant results and normed data for all subjects.

<u>Variable</u>	Number of Cases	df	Standard Dev.	t-Value
BODY & APPEARANCE	101	100	9.0	2.53

Mean	Normed Data Value	Mean Difference	2-Tail Sig.
58.5	56.2	2.27	.013

Hypothesis 3

There is no significant difference in Conception About Body and Appearance, as determined by the Erwin Identity Scale, between the normed data and participants in the intramural sports program.

There was significant difference found to exist between the sample mean versus the mean of the population regarding the Conception About Body and Appearance subscale. By looking at the mean scores a moderate difference in the mean scores of must be observed. In using the one sample t-test procedure a 2-tail significance score of .013 was obtained ($p < .05$) (see Table 3). Therefore, the hypothesis is rejected as stated.

Table 4.

One Sample t-tests using intramural participant results and normed data for all male subjects.

<u>Variable</u>	Number of Cases	df	Standard Dev.	t-Value
<u>CONFIDENCE</u>	70	69	15.9	2.58
	Mean	Normed Data Value	Mean Difference	2-Tail Sig.
	93.4	88.5	4.90	.012

Hypothesis 4

There is no significant difference in Confidence, as determined by the Erwin Identity Scale, between the normed data and male participants in the intramural sports.

There was significant difference found to exist between the sample mean versus the mean of the population regarding the Confidence subscale. By looking at the mean scores a real difference in the mean scores of must be observed. In using the one sample t-test procedure a 2-tail significance score of .012 was obtained ($p < .05$) (see Table 4).

Therefore, the hypothesis is rejected as stated.

Table 5.

One Sample t-tests using intramural participant results and normed data for all male subjects.

<u>Variable</u>	Number of Cases	df	Standard Dev.	t-Value
<u>SEXUAL IDENTITY</u>	70	69	11.57	1.17
	Mean	Normed Data Value	Mean Difference	2-Tail Sig.
	66.8	65.2	1.61	.247

Hypothesis 5

There is no significant difference in Sexual Identity, as determined by the Erwin Identity Scale, between the normed data and male participants in the intramural sports.

There was no significant difference found to exist between the sample mean versus the mean of the population regarding the Sexual Identity subscale. In using the one sample t-test procedure a 2-tail significance score of .247 was obtained ($p > .05$) (see Table 5). Therefore, the hypothesis is not rejected as stated.

Table 6.

One Sample t-tests using intramural participant results and normed data for all male subjects.

<u>Variable</u>	Number of Cases	df	Standard Dev.	t-Value
<u>BODY & APPEARANCE</u>	70	69	9.49	1.17

Mean	Normed Data Value	Mean Difference	2-Tail Sig.
58.4	57.1	1.33	.246

Hypothesis 6

There is no significant difference in Conception About Body and Appearance, as determined by the Erwin Identity Scale, between the normed data and male participants in the intramural sports.

There was no significant difference found to exist between the sample mean versus the mean of the population regarding the Conception About Body and Appearance subscale. In using the one sample t-test procedure a 2-tail significance score of .246 was obtained ($p > .05$) (see Table 6). Therefore, the hypothesis is not rejected as stated.

Table 7.

One Sample t-tests using intramural participant results and normed data for all female subjects.

<u>Variable</u>	Number of Cases	df	Standard Dev.	t-Value
<u>CONFIDENCE</u>	31	30	15.23	2.51
	Mean	Normed Data Value	Mean Difference	2-Tail Sig.
	94.1	87.2	6.86	.018

Hypothesis 7

There is no significant difference in Confidence, as determined by the Erwin Identity Scale, between the normed data and female participants in the intramural sports.

There was significant difference found to exist between the sample mean versus the mean of the population regarding the Confidence subscale. By looking at the mean scores a real difference in the mean scores of must be observed. In using the one sample t-test procedure a 2-tail significance score of .018 was obtained ($p < .05$) (see Table 7).

Therefore, the hypothesis is rejected as stated.

Table 8.

One Sample t-tests using intramural participant results and normed data for all female subjects.

<u>Variable</u>	Number of Cases	df	Standard Dev.	t-Value
<u>SEXUAL IDENTITY</u>	31	30	9.01	2.14
	Mean	Normed Data Value	Mean Difference	2-Tail Sig.
	69.1	65.6	3.46	.041

Hypothesis 8

There is no significant difference in Sexual Identity, as determined by the Erwin Identity Scale, between the normed data and female participants in the intramural sports.

There was significant difference found to exist between the sample mean versus the mean of the population regarding the Sexual Identity subscale. By looking at the mean scores a moderate difference in the mean scores of must be observed. In using the one sample t-test procedure a 2-tail significance score of .041 was obtained ($p < .05$) (see Table 8). Therefore, the hypothesis is rejected as stated.

Table 9.

One Sample t-tests using intramural participant results and normed data for all female subjects.

<u>Variable</u>	Number of Cases	df	Standard Dev.	t-Value
<u>BODY & APPEARANCE</u>	31	30	7.97	2.34
	Mean	Normed Data Value	Mean Difference	2-Tail Sig.
	58.55	55.2	3.35	.026

Hypothesis 9

There is no significant difference in Conception About Body and Appearance, as determined by the Erwin Identity Scale, between the normed data and female participants in the intramural sports.

There was significant difference found to exist between the sample mean versus the mean of the population regarding the Conception About Body and Appearance subscale. By looking at the mean scores a moderate difference in the mean scores of must be observed. In using the one sample t-test procedure a 2-tail significance score of .026 was obtained ($p < .05$) (see Table 9). Therefore, the hypothesis is rejected as stated.

One-way Analysis of Variance (ANOVA) was used to test hypotheses 10-12.

Table 10.

Analysis of Variance using the three separate residence groups (Greek housing, off-campus, residence hall) of the intramural participants on the Confidence subscale for all subjects.

Source	df	Sum of Squares	Mean Squares	F Ratio
Between Groups	2	7.57	3.79	.015
Within Groups	98	24410.59	249.09	
Total	100	24418.16		

Groups	Count	Mean	Stand. Dev.
Off-Campus	41	93.8	14.94
Greek	31	93.2	14.66
Resid. Hall	29	93.8	17.97
TOTAL	101	93.6	15.63

Levene's Test for Homogeneity of Variances

Statistic	D.F. 1	D.F. 2	2-Tail Sig.
1.4833	2	98	.232

Hypothesis 10

There is no significant difference in Confidence as determined by the Erwin Identity Scale, between participants in the intramural sports program living in different housing units (Greek housing, off-campus, residence hall).

There was no significant difference found to exist between the sample mean versus the mean of the population regarding the Confidence subscale. In using an Analysis of Variance procedure a 2-tail significance score of .232 was obtained. Through this procedure a F ratio of .015 was obtained ($p > .05$) (see Table 10). Therefore, the hypothesis is not rejected as stated.

Table 11.

Analysis of Variance using the three separate residence groups (Greek housing, off-campus, residence hall) of the intramural participants on the Sexual Identity subscale for all subjects.

Source	D.F.	Sum of Squares	Mean Squares	F Ratio
Between Groups	2	7.03	3.52	.029
Within Groups	98	11766.22	120.06	
Total	100	11773.25		

Groups	Count	Mean	Stand. Dev.
Off-Campus	41	67.8	10.04
Greek	31	67.1	10.64
Resid. Hall	29	67.6	12.45

TOTAL	101	67.5	10.85
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Levene's Test for Homogeneity of Variances

Statistic	D.F. 1	D.F. 2	2-Tail Sig.
1.3142	2	98	.273

Hypothesis 11

There is no significant difference in Sexual Identity, as determined by the Erwin Identity Scale, between participants in the intramural sports program living in different housing units (Greek housing, off-campus, residence hall).

There was no significant difference found to exist between the sample mean versus the mean of the population regarding the Sexual Identity subscale. In using an Analysis of Variance procedure a 2-tail significance score of .273 was obtained. Through this procedure a F ratio of .029 was obtained ($p > .05$) (see Table 11). Therefore, the hypothesis is not rejected as stated.

There were no significant differences found to exist between intramural participants and where their residence is on the Sexual Identity subscale. In using an Analysis of Variance procedure a 2-tail significance score of .273 was obtained ($p < .05$). Through this procedure a F ratio of .0293 was obtained ($f < 1.0$) (see Table 11). Therefore, the hypothesis is accepted as stated.

Table 12.

Analysis of Variance using the three separate residence groups (Greek housing, off-campus, residence hall) of the intramural participants on the Conception About Body and Appearance subscale for all subjects.

Source	D.F.	Sum of Squares	Mean Squares	F Ratio
Between Groups	2	250.03	125.015	1.557
Within Groups	98	7875.10	80.36	
Total	100	8125.13		

Groups	Count	Mean	Stand. Dev.
Off-Campus	41	60.3	8.50
Greek	31	57.5	7.88
Resid. Hall	29	56.8	10.56
TOTAL	101	58.5	9.01

Levene's Test for Homogeneity of Variances

Statistic	D.F. 1	D.F. 2	2-Tail Sig.
1.6268	2	98	.202

Hypothesis 12

There is no significant difference in Conception About Body and Appearance, as determined by the Erwin Identity Scale, between participants in the intramural sports program living in different housing units (Greek housing, off-campus, residence hall).

There was no significant difference found to exist between the sample mean versus the mean of the population regarding the Conception About Body and Appearance subscale. In using an Analysis of Variance procedure a 2-tail significance score of .202 was obtained. Through this procedure a F ratio of 1.557 was obtained ($p > .05$) (see Table 12). There is not enough evidence to prove that the F ratio was real enough to reject. Questions do arise though with the three groups and the Conception About Body and Appearance subscale. Therefore, the hypothesis is not rejected as stated.

Discussion

It appeared in analyzing the results of this study that participants in intramural sports programs did have higher levels of identity than the normal group. It was clear to see from the results that those who participate in intramural sports seemed to have better confidence and better concept of body appearance than those of the normative data (see Appendix E). This was the case for both the males and females that participated in the research process. In addition the females showed better sexual identity than those of the normative data did. The overall females' statistics proved to be moderately higher than that of the normed data. The results indicated that those females who participated in intramural sports had a better sense of identity than those of the normative data.

When comparing the three separate residence groups (Greek housing, off-campus, residence hall) the hypotheses that were stated all remained not rejected. It can be concluded from the research that it does not matter where people reside. The results of this study support that participants in intramural sports seem to have better development of identity.

CHAPTER V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This study assessed the identity of student intramural participants and compared the results to normative data of college students using the Erwin Identity Scale (EIS) (Erwin, 1979). The study examined intramural sports programs as an outside learning venue for college students. The study sought to identify the level of identity of intramural participants.

The study only focused on the intramural student population located on the campus of a large university located in the south central part of the United States. Groups such as extramural sports, sport clubs, or informal sports were included in the study. In addition, the study was only concerned with the player-participant and did not distinguish any levels of extra involvement in the intramural sports programs such as, intramural sports supervisor, intramural sports official, Greek intramural sports chair, and/or team captain/manager.

A review of related literature was conducted in order to highlight research related to college student development and intramural sports participation. The author examined literature in student development, intramural sports, Chickering's seven vectors in Education of Identity (1969; and Chickering & Reisser, 1993), and a more in-depth view of the establishment of identity. In essence, the author mirrored the study of Murphy (1985). Many of the materials, such as the hypotheses and literature review topics were similar. However, the time difference and location of research completed was far different from the original work completed by Murphy (1985).

The first literature topic that was reviewed was that of the student development. The bulk of the review focussed on the student affairs programs and how they influence student growth. Despite the vast intramural sports involvement of college students through the country there was virtually no mention of the program in the student affairs literature. On the other hand, within the intramural sports literature review, there was plenty of mention of how sport participation had an effect on individual development. Unfortunately, little related data could be clear enough to state how much growth can be influenced. The literature on this topic was very basic and unsupportive. However, Mull, Bayless, and Ross (1983) were among the first recreational sports professionals to consider student development concepts as a possible philosophical foundation for their work.

Conclusions

Conclusions were discussed as responses to the hypotheses presented in Chapter One of this thesis.

Hypothesis 1. There is no significant difference in Confidence, as determined by the Erwin Identity Scale, between the normed data and participants in the intramural sports program.

A significant difference was found to exist between intramural participants and the normed data on the Confidence subscale.

Hypothesis 2. There is no significant difference in Sexual Identity, as determined by the Erwin Identity Scale, between the normed data and participants in the intramural sports program.

No significant difference was found to exist between intramural participants and the normed data on the Sexual Identity subscale.

Hypothesis 3. There is no significant difference in Conception About Body and Appearance, as determined by the Erwin Identity Scale, between the normed data and participants in the intramural sports program.

A significant difference was found to exist between intramural participants and the normed data on the Conception About Body and Appearance subscale.

Hypothesis 4. There is no significant difference in Confidence, as determined by the Erwin Identity Scale, between the normed data and male participants in the intramural sports.

A significant difference was found to exist between male intramural participants and the normed data on the Confidence subscale.

Hypothesis 5. There is no significant difference in Sexual Identity, as determined by the Erwin Identity Scale, between the normed data and male participants in the intramural sports.

No significant difference was found to exist between male intramural participants and the normed data on the Sexual Identity subscale.

Hypothesis 6. There is no significant difference in Conception About Body and Appearance, as determined by the Erwin Identity Scale, between the normed data and male participants in the intramural sports.

No significant difference was found to exist between male intramural participants and the normed data on the Conceptions About Body and Appearance subscale.

Hypothesis 7. There is no significant difference in Confidence, as determined by the Erwin Identity Scale, between the normed data and female participants in the intramural sports.

A significant difference was found to exist between female intramural participants and the normed data on the Confidence subscale.

Hypothesis 8. There is no significant difference in Sexual Identity, as determined by the Erwin Identity Scale, between the normed data and female participants in the intramural sports.

A significant difference was found to exist between female intramural participants and the normed data on the Sexual Identity subscale.

Hypothesis 9. There is no significant difference in Conception About Body and Appearance, as determined by the Erwin Identity Scale, between the normed data and female participants in the intramural sports.

A significant difference was found to exist between female intramural participants and the normed data on the Conceptions About Body and Appearance subscale.

Hypothesis 10. There is no significant difference in Confidence as determined by the Erwin Identity Scale, between participants in the intramural sports program living in different housing units (Greek housing, off-campus, residence hall).

No significant difference was found to exist between intramural participants and where their residence is on the Confidence subscale.

Hypothesis 11. There is no significant difference in Sexual Identity, as determined by the Erwin Identity Scale, between participants in the intramural sports program living in different housing units (Greek housing, off-campus, residence hall).

No significant difference was found to exist between intramural participants and where their residence is on the Sexual Identity subscale.

Hypothesis 12. There is no significant difference in Conception About Body and Appearance, as determined by the Erwin Identity Scale, between participants in the intramural sports program living in different housing units (Greek housing, off-campus, residence hall).

No significant difference was found to exist between intramural participants and where their residence is on the Conceptions About Body and Appearance subscale.

Significant differences were found to exist between intramural participants and the normed data on the Confidence and Conception About Body and Appearance subscales. The results from this study were different from those that were found from Murphy's (1985) study. Murphy's results concluded that no differences were found to exist on the Confidence subscale. During Murphy's analysis of data of the Confidence subscale, environmental referents stated that intramural activities acted as a factor for increasing self-confidence of an individual. The researcher of this study found that information to be true as stated. As stated within Chapter Two Hood, Riahinejad, and White's (1986) study found that those students who were found to participate in recreational activities had significantly higher scores as seniors on all three sub-scales. Additionally, Williams and Winston (1985) conducted research on participation in organized student activities using the Student Development Task Inventory. Their research was directed to the growth of a student on a Confidence subscale. Their results indicated that "students who participated in organized student activities and organizations

showed statistically greater development task achievement in the areas of interdependence, educational plans, and lifestyle plans than did students who did not participate" (p. 56).

Compared to Murphy's study a similar hypothesis was found to exist between the About Body and Appearance subscale. Since no environmental referents were collected for this study the information that Murphy mentioned as environmental referents were observed, and assumptions were made for this study. Murphy stated, "the living environment played a major role in facilitating growth on this scale" (pg. 67). An example of this was that of women completing their sorority rush process. This process was an important experience that made them aware of how important appearance can be.

When subjects were compared by gender to the normed data there was some difference in the findings. In the case of the Confidence subscale, both the male and female subjects showed significant differences as compared to the normed data. As for the two remaining subscales, Sexual Identity & the Conception About Body and Appearance, only the female subjects showed a difference to the normed data. Once again these results are different from Murphy's (1985) study. Murphy found no significant differences between both males and females by the Confidence subscale. As for the other two subscales, Sexual Identity & the Conception About Body and Appearance, Murphy too found that females were higher and more significant than the males. This information is related to the study of Weston and Stein (1977). From their study, Weston and Stein believed that "Participation in campus activities and general involvement in college experiences can provide opportunities for women to test their various abilities, interests, and preferences. This participation coupled with leadership

functions for some, can help build a sense of individual identity” (p. 21). Through there research they found that participation in college activities, such as campus recreational activities, were related to the identity of the female college student.

There was no significant difference found to exist between intramural participants and where they lived for any of the three subscales. Due to Murphy’s insufficient numbers in dealing with residence, no results from his study could be stated. There was an overwhelming difference in numbers between the three groups to be compared. The results would have produced unreliable statistical results. On the other hand Weston and Stein (1977) found through their study that there was no related factors found between housing to identity. Additionally Hood, Riahinejad, and White (1986) also found no differences between living arrangements.

The researcher feels confident that the results from the study seemed to be what was expected as a result of the literature review. The expectation was that students who participate in intramural sports had a better sense of identity. While this is welcomed news there remains more work to be done to relate student development to intramural participation. The researcher believed that being involved in some aspect of an intramural sport can allow one to receive some of lives greatest challenges. The challenges of being able to communicate with others, compete against others, and identify one’s self while around others is a life long development that one can not receive by sitting in a college/university classroom.

Recommendations

Recommendations were presented for further research or assistance in the area of campus recreation. From the research findings of this thesis, there is information, which helps prove that intramural sports do act as a positive influence on student development.

Recommendation 1. A further four-year study of college students should be tracked to see how students who participate in intramural sports progress in identity over time.

Recommendation 2. This same study should be completed/replicated at other institutions to see if there are any other relations that exist to the study completed at Oklahoma State University.

Recommendation 3. Further research should be conducted which investigates the influence of intramural sports participation on the other vectors described by Chickering. Perhaps other vectors are more directly affected by participation in sports. To see how intramural participants' form some form of autonomy as compared to those who do not participate in intramural sports would be very beneficial. Also a relation of managing emotions could be observed and compared to how participants take out their own aggression could also be very beneficial. These are just a few of the vectors, but surely all of them could be observed for some beneficial use.

Recommendation 4. Further research should be conducted which uses the new revised addition of the Erwin Identity Scale. In 1997 Sebrell and Erwin revised the instrument to better represent today's students. The reason the instrument was not used in this research study was because both Sebrell and Erwin still had a few more validation

tests to complete before making it available to the public. The new instrument also takes into consideration the new revised work of Chickering's from his New Edition of Education and Identity (Chickering & Reisser, 1993).

Recommendation 5. Further studies should include demographic data in addition to just gender, and housing (living area). The studies should include a look at grade classifications, race, socioeconomic factors, previous sports participation, institutional environment, and the quality of the intramural sports program.

Recommendation 6. Further research, which addresses other facets of the recreational sports environment, should be undertaken. Examples include; sport clubs, extramural sports, student staff (officials and supervisors), and team represented captains/managers. The issue of credibility in the student development among intramural sports participation still exists, and until the programs' contributions can be empirically documented the issue will still exist.

Recommendation 7. Specific research should be conducted to determine if the level of commitment to the intramural sports activity plays an influential role in developing identity or any other vector. Are there developmental differences between the participant/leader and the individual who just participates?

Recommendation 8. This research paper was completed without asking any form of environmental referents. It would be beneficial to help analyze the hypotheses better if some form of environmental information was available. A possible interview to discuss the results with a few randomly selected participants who participated in the questionnaire would be beneficial.

Recommendation 9. Colleges and universities must examine the role that intramural sports programs can play in student development programs on campus. If they have a critical role to play then they must be coordinated and monitored like other similar programs. The professional staff who promotes these programs must be supported, as does the other administration staff in the institutional setting. In addition, this professional staff must be willing to follow the institution's vision and mission just as the other programs on campus do.

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APPENDIX A

EIS - III

Erwin Identity Scale

Instructions

The following series of statements describes how people sometimes feel about themselves and other people. Please read each statement and record as accurately as possible how true of you each statement is. Sometimes people try to make themselves out to be better than they really are. Therefore, the questionnaire includes some items to check on this. The first thing that comes to your mind is probably the best response. There may be one or two statements that do not directly apply to you; however, try to answer them as they might apply to you in a hypothetical situation. Remember there are no right or wrong answers so do not spend too much time deciding on a correct answer. Respond to the statements in order and do not leave out any responses.

For each statement ask yourself:

How True Is This Of Me?

After each statement mark a letter from A to E on the separate answer sheet describing how true the statement is of you.

A	B	C	D	E
Very True of Me	Somewhat True of Me	Not Sure or Neutral	Somewhat Untrue of Me	Not At All True of Me

Be sure the number on the answer sheet corresponds to the number of the statement to which you are responding. There is no time limit but work as quickly as possible.

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1. I am as sure of myself as most other people seem to be sure of themselves.
2. I have found one of the easiest ways to make friends with others is to be the kind of person they would like me to be.
3. It seems like when I trust someone to whom I am attracted I get hurt.
4. I do not have as strong control over my feelings as I would like.
5. It does not bother me that I am not as attractive as other people.
6. I rarely express my feelings to a friend for fear I will get hurt.
7. When I look in the mirror at myself, I am satisfied with the physical image I see.
8. I usually do not have the assurance that what I am doing is the best thing.
9. I believe that people should follow an established dress code in order to be accepted in a work environment.
10. I sometimes regret my behavior in informal social situations (e.g. parties).
11. My feelings often interfere with my interactions with other people.
12. It usually takes so much effort to make decisions I wish somebody else would make decisions for me.
13. I have many doubts about what I am going to do with my life.
14. I feel uncomfortable when I am seen with someone who dresses out of style.
15. If I really let go of my feelings, I probably would not do anything that I would later regret.
16. When I compare myself to people whom I think are extremely good looking, I feel inferior.
17. In most situations, I would not hesitate to express my beliefs to those with opposite beliefs.
18. Most of the time I am comfortable with my feelings.
19. I believe there is only one right person for me with whom I could establish a close love relationship.
20. A person should adapt his or her appearance to the group that happens to be with him or her at the time.
21. I envy those people who know where they are going in life.
22. If I did not wear the basic style of dress that other people wear, I would feel left out and excluded.
23. If I shared my true feelings with a close friend (male or female), s/he would probably think less of me.
24. No matter how sad I feel, I usually think things will get better.
25. Each day presents new challenges that I cannot wait to confront.
26. I feel confident that I have chosen or will choose the best occupational field for me.
27. I am capable of understanding most ideas I read about.
28. When I am hurt by someone I care for, I find it hard to trust others for quite a long time.
29. I often feel inferior when I compare myself to other people.

30. I often have uneasy thoughts about the way I appear to other people.
31. I believe there are only a few people (1 or 2) in the world I could be happy with in a close love relationship.
32. I do not mind appearing different in dress from other people because that is me.
33. No matter how hard I try I do not feel prepared to enter the working world.
34. Even though it may be contrary to my normal wishes, I usually dress to fit the situation or wishes of others.
35. My confidence is really shaken when I see so many capable people with abilities as good or better than mine.
36. If I seem to be not dressed appropriately for a particular situation. I usually become very anxious and feel out of place.
37. When I am a stranger in a group. I often introduce myself to others.
38. When other people discuss how important it is to be handsome and pretty, I feel badly and wish I were more attractive.
39. I would not change my style of clothes just because my boss indicated that I should dress more like him or her.
40. When I am in a crowd. I feel uncomfortable about the way I look.
41. It is uncomfortable for me to speak out in groups for fear my statement may be incorrect.
42. I realize that most of my feelings and desires are natural and normal.
43. My relationship with people of the opposite sex usually have not lasted as long as I would like.
44. There are certain feelings I have that I do not understand.
45. My feelings often overwhelm me when I try to establish close friendships.
46. I would not pattern my appearance after the dress style expected by my peer group.
47. If a boss or teacher criticizes by work, it is usually because they do not understand me.
48. I frequently have doubts that I can have a successful and happy close love relationship.
49. I usually do not smile because I am uncomfortable with the way my smile looks.
50. When I fall in love, I am reasonably sure of my feelings.
51. I still have difficulty making decisions for myself.
52. To satisfy my needs I have to be aggressive or clever.
53. I feel some guilt when I realize how strong my feelings are.
54. I do not understand myself very well.
55. I do not know myself well enough to make a firm occupational choice.
56. It is difficult for me to answer questions like these about myself.
57. I have trouble making decisions when other people disagree with me.
58. Even when I have most of the facts I often postpone making decisions.
59. Other people know what is better for my life than I do.

Erwin Identity Scale

Answer Sheet

Test # _____

A B C D E
 Very true of Somewhat true Not sure or Somewhat Not at all true
 me of me neutral untrue of me of me

Answer each question to how true each statement is to you.

1.) A B C D E	21.) A B C D E	41.) A B C D E
2.) A B C D E	22.) A B C D E	42.) A B C D E
3.) A B C D E	23.) A B C D E	43.) A B C D E
4.) A B C D E	24.) A B C D E	44.) A B C D E
5.) A B C D E	25.) A B C D E	45.) A B C D E
6.) A B C D E	26.) A B C D E	46.) A B C D E
7.) A B C D E	27.) A B C D E	47.) A B C D E
8.) A B C D E	28.) A B C D E	48.) A B C D E
9.) A B C D E	29.) A B C D E	49.) A B C D E
10.) A B C D E	30.) A B C D E	50.) A B C D E
11.) A B C D E	31.) A B C D E	51.) A B C D E
12.) A B C D E	32.) A B C D E	52.) A B C D E
13.) A B C D E	33.) A B C D E	53.) A B C D E
14.) A B C D E	34.) A B C D E	54.) A B C D E
15.) A B C D E	35.) A B C D E	55.) A B C D E
16.) A B C D E	36.) A B C D E	56.) A B C D E
17.) A B C D E	37.) A B C D E	57.) A B C D E
18.) A B C D E	38.) A B C D E	58.) A B C D E
19.) A B C D E	39.) A B C D E	59.) A B C D E
20.) A B C D E	40.) A B C D E	

Please complete the additional information below, by checking the following that apply to you.

- ☐ Male _____ Female _____
☐ Off campus student _____, Greek student housing _____, or Residence student halls
☐ Freshman _____, Sophomore _____, Junior _____, or Senior _____

The OSU Intramural Sports Department thanks you for your time. Your support is greatly appreciated!

APPENDIX B

Erwin Identity Scale
 Copyright 1977, T. Dary Erwin
 Scoring Key (06/81)

Sub-Scale

<u>Item</u>	<u>Confidence</u>	<u>Sexual Identity</u>	<u>Conceptions Body & Appearance</u>
1.	+		
2.	-		
3.		-	
4.		-	
5.			+
6.		-	
7.			+
8.	-		
9.			-
10.		-	
11.		-	
12.	-		
13.	-		
14.			-
15.		+	
16.			-
17.	+		
18.		+	
19.		-	
20.			-
21.	-		
22.			-
23.		-	
24.	+		
25.	+		
26.	+		
27.	+		
28.		-	
29.	-		
30.			-
31.		-	
32.			+
33.	-		
34.			-
35.	-		
36.			-
37.	+		
38.			-
39.			+
40.			-
41.	-		
42.		+	
43.		-	
44.		-	
45.		-	

46.			+
47.	-	-	
48.			
49.		+	
50.	-		
51.		-	
52.		-	
53.	-		
54.	-		
55.	-		
56.	-		
57.	-		
58.	-		
59.	-		

Scoring Directions: If sign is + , weight the item alternatives as follows:

- 5 - very true of me
- 4 - somewhat true of me
- 3 - not sure or neutral
- 2 - somewhat untrue of me
- 1 - not at all true of me

If the sign is - , reverse the item weights to be:

- 1 - not at all true of me
- 2 - somewhat untrue of me
- 3 - not sure or neutral
- 4 - somewhat true of me
- 5 - very true of me

Sum the item weights separately for each sub-scale. The range of scores for each sub-scale should be 24-120 on Confidence, 19-95 on Sexual Identity, and 16-80 on Conceptions About Body and Appearance.

APPENDIX C

Douglas D Ahlum
04/24/2000 05:00 PM

To:

cc:

Subject: Oklahoma State's Intramural Sports Department needs your assistance!

Dear Intramural Sports Participant:

The division of Campus Recreation is supporting a research project that we hope will enable us to better understand the students we serve and consequently provide better programming for you. The purpose of the research is to analyze how intramural participants establish identity as compared to those participants who do not participate in intramural sports.

You have been selected as part of a group of students to participate in the study. Intramural sports and myself are asking your assistance in making the overall efforts successful. If you choose to assist us in this study, you will be completing a 59-item questionnaire. It will take around 20-minutes of your time to complete. The questionnaire will be available to take on three separate dates and times, and they are: Thursday, April 27, 2000, at 7:00PM; Saturday, April 29, 2000, at 12:00PM; and Monday, May 1, 2000, at 3:30PM. All exams will be held in the Wellness Center Auditorium. You may also come by the intramural sports office to pick up a copy of the questionnaire. The deadline for all questionnaires to be returned to the research will be May 3, 2000 by 8PM.

At the time you choose and attend an exam time or pick a copy up you will be given a consent form. The form will allow you to fully understand what type of research you will be involved in. It will explain that when you attend the meeting time that you will receive a number. This number is will be your form of identification and it will represent you throughout the entire research process. All of your responses will be kept confidential. No individual student's answers will be shared in any way. You will also be asked during this time if your age falls between the ages of 18-24. If you do not fall between these ages you will be unable to participate. Please understand that you participation is voluntary and in no way will you be penalized if you do not participate. Also understand that if at anytime during the research process you become uncomfortable, you should feel free to withdraw from the process without any penalty.

Your cooperation is critical to the success of this research project. The items on the questionnaire are not directly related to the recreational sports program but rather are related to concerns of all college students. The time you spend in participating in this study will be a great assistance to Campus Recreation Department at Oklahoma State University, not to mention other institutions as well. I would like to thank you in advance for your time and consideration. Your assistance can only help us help you!

Could you please reply to this memo with a short message stating if you will assist with the study. A simple yes or no will be sufficient. In addition could you please state which exam session you will be attending. I look forward to receiving your reply.

Sincerely,

Douglas D. Ahlum
Graduate Assistant, Intramural Sports Department

APPENDIX D

Identification # _____

CONSENT FORM

The division of Campus Recreation is supporting a research project that we hope will enable us to better understand the students we serve and consequently provide better programming for you. The purpose of the research is to analyze how intramural participants establish identity as compared to those participants who do not participate in intramural sports. The name of the study is Identity Development among Intramural Sports Participants at Oklahoma State University.

You will notice that in the top-right corner of this Consent form there is a number. This number is your form of identification and it will represent you throughout the entire research process. All of your responses will be kept confidential. No individual student's answers will be shared in any way. Please understand that your participation is voluntary and in no way will you be penalized if you do not participate. Also understand that if at anytime during the research process you become uncomfortable, you should feel free to withdraw from the process without any penalty.

You will now complete a 59-item questionnaire. It will take around 20-minutes of your time to complete. Your exam will be analyzed and compared to the other students taking the questionnaire. The statistics collected from all of the exams will also be compared and analyzed to normed data of the Erwin Identity Scale.

Your cooperation is critical to the success of this research project. The items on the questionnaire are not directly related to the recreational sports program but rather are related to concerns of all college students. The time you spend in participating in this study will be a great assistance to Campus Recreation Department at Oklahoma State University, not to mention other institutions as well. I would like to thank you for your involvement, time and consideration. Your assistance is greatly appreciated!

I have read and fully understand the consent form. I sign it freely and voluntarily. A copy has been given to me.

I, (print name) _____, hereby authorize or direct Douglas Ahlum, project director, to perform the following treatment.

Date: _____ Time: _____

Signature: _____

I certify that I have personally explained all elements of this form to the subject or his/her representative before requesting the subject or his/her representative to sign it.

Signed: _____
Project director or authorized representative

For an explanation of the research please contact the researcher, Douglas Ahlum at 405-744-7407 or the advisor Dr. Christine Cahsel at 405-744-6815. Additional contact: Sharon Bacher, IRB Executive Secretary, Oklahoma State University, 203 Whitehurst, Stillwater, OK 74078. Phone: 405-744-5700.

APPENDIX E
ERWIN IDENTITY SCALE

Normative Information

(N = 2514)

	<u>Confidence</u>	<u>Sexual Identity</u>	<u>Conceptions About Body and Appearance</u>
Reliability	.89	.79	.80
SCALE MEANS			
Overall	87.7	65.4	56.2
Females	87.2	65.6	55.2
Males	88.5	65.2	57.1
Freshmen	84.2	63.2	54.4
Sophomores	87.3	65.4	56.1
Juniors	91.8	66.9	58.3
Seniors	92.1	68.1	57.1
DECILES			
90%	106	79	68
80%	101	74	64
70%	96	71	61
60%	92	68	58
50%	89	65	56
40%	85	63	54
30%	81	60	52
20%	76	57	49
10%	67	52	45

APPENDIX F

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD

Date: April 24, 2000 IRB #: ED-00-231

Proposal Title: "IDENTITY DEVELOPMENT AMONG INTRAMURAL
SPORTS PARTICIPANTS AT OKLAHOMA STATE
UNIVERSITY "Principal Christine Cashel
Investigator(s): Douglas Ahlum.Reviewed and
Processed as: Expedited

Approval Status Recommended by Reviewer(s): Approved

Signature:



Carol Olson, Director of University Research Compliance

April 24- 2000

Date

Approvals are valid for one calendar year, after which time a request for continuation must be submitted. Any modification to the research project approved by the IRB must be submitted for approval with the advisor's signature. The IRB, office MUST be notified in writing when a project is complete. Approved projects are subject to monitoring by the IRB. Expedited and exempt projects may be reviewed by the full Institutional Review Board.

VITA 2

Douglas Dale Ahlum

Candidate for the Degree of

Master of Science

Thesis: IDENTITY DEVELOPMENT AMONG INTRAMURAL SPORTS
PARTICIPANTS

Major Field: Health, Physical Education, and Leisure Studies

Biographical:

Personal Data: Born in Bethlehem, Pennsylvania, on December 27, 1975, the son of Donald and Darlene Ahlum.

Education: Graduated from Quakertown High School, Quakertown, Pennsylvania in May 1994; received Bachelor of Science Degree with a major in Sports Management from Robert Morris College, Pittsburgh, Pennsylvania in May 1998. Completed the requirements for the Masters of Science Degree with a major in Health, Physical Education, and Leisure Studies at Oklahoma State University in (July, 2000).

Experience: Raised in a small suburb of Philadelphia, Pennsylvania; and was always active in some sort of sporting activity. Played two years of collegiate football at Robert Morris College, Pittsburgh, Pennsylvania and then became employed by the Campus Recreation Department of Robert Morris College. After graduation of my Undergraduate Degree I became employed as a Graduate Assistant; Oklahoma State University, Intramural Sports Department, 1998 to May 2000.

Professional Membership(s): The National Intramural Recreational Sports Association (NIRSA)