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A Comparison of Athletic Identity and Career Maturity of Female Student-Athletes at Different Levels of Competition

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Student-Athletes at Different Levels of Competition

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Abstract

This study explored the relationship between the athletic identity and career maturity of women's basketball student-athletes. Differences in athletic identity and career maturity were also investigated based on a women's basketball student-athlete's level of competition, race, year in school, socioeconomic status, and professional athletic career aspirations. In order to examine the relationship between these variables, a convenience sample of 209 women's basketball student-athletes from NCAA Division I ($n = 62$), NCAA Division II ($n = 40$), NCAA Division III ($n = 50$), and NAIA ($n = 57$) institutions located in the southeastern region of the United States participated in the study. Participants completed the Career Maturity Inventory-Revised Attitude Scale, the Athletic Identity Measurement Scale, and a demographic questionnaire. From the analyses, it was found that for women's basketball student-athletes, stronger identification with the athletic role is associated with lower levels of career maturity. It was also found that NCAA Division I student-athletes had significantly higher levels of athletic identity and significantly lower levels of career maturity than Division II student-athletes. Likewise, student-athletes that planned to pursue a professional basketball career ($n = 76$) displayed significantly higher levels of athletic identity and significantly lower levels of career maturity than those that do not ($n = 133$). However, study results did not find any statistically significant differences in athletic identity or career maturity based on a women's basketball student-athlete's race, year in school, or socioeconomic status. Future research should explore an interaction of psychological variables that may affect the relationship of athletic identity and career maturity of women's basketball student-athletes as well as investigate the athletic identity and career maturity of female student-athletes from other sports where there is a potential to compete professionally.

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Chapter 1: Introduction

In the mid-1800's, college presidents attempted to fill a need for physical activity by forcing their students to engage in manual labor in the form of farming or boulder clearing (Estler, 2013). However, students had their own idea of what physical activity should look like and soon devised intramural athletic contests that ultimately developed into intense rivalries between opposing institutions. Fast-forward throughout the next 150 years, and what started back then as need for physical activity has now blossomed into a dominating force in American culture, college athletics.

College athletics has been engrained into our society because of the impact it has both socially and financially. College presidents recognize that sports is a rallying point for many communities, and they also realize the economic impact that athletics can have on their campuses (Dowling, 2001; Duderstadt, 2000; Herbert, 2005; Smith, 2011). High school athletes and their parents also recognize the importance of college athletics and see it as a way to attend college by obtaining an athletic scholarship. Consequently, many parents and their children have invested vast amounts of time and money developing the skills necessary for their children to compete at the college level, despite research showing very few move on to compete collegiately (NCAA, 2015a).

College athletics has had many landmark moments and continues to evolve. Academic and eligibility guidelines are constantly revisited in an attempt to maintain the integrity of higher education. Additionally, more focus is now being put on helping student-athletes develop life skills that can assist them with their transition away from sport through various National Collegiate Athletic Association (NCAA) Life Skills student-athlete development programs across the country (NCAA, 2015b). While the current landscape of college athletics provides the

arena for both male and female athletes to showcase their talents, this has not always been the case. College athletics has seen its fair share of battles, but one of the most important portions of its history includes the evolvement of women's college athletics.

History of Women's College Athletics

Women's sports originated in the nineteenth century mainly as an initiative from female faculty members to promote physical education amongst their female student population (Estler & Nelson, 2005). It was also initiated in order to offset doubts about the physical ability of women to succeed intellectually posed by male faculty and administrators (Estler & Nelson, 2005). However, female faculty wanted a model of women's sports that was different than the men's model of sports for entertainment. In 1899, the women's basketball rules committee of the American Association for the Advancement of Physical Education (AAAPE) was founded (Estler & Nelson, 2005). The committee, which was led by Senda Berenson, designed women's sports to be an important part of the academic mission of colleges. Therefore, their model of women's sports placed value on participation instead of focusing on making money and entertaining spectators (Estler & Nelson, 2005).

Women's sports would continue to grow during the early twentieth century. However, it soon began to be seen as a threat to men's sports because there was a fear that funds previously spent on men's sports would be funneled towards improving women's programs (Estler & Nelson, 2005; Willey, 1996). Consequently, in 1920, the Amateur Athletic Union (AAU) attempted to take over control of women's sports (Estler & Nelson, 2005). However, the attempt failed resulting in a stronger resolve by women's physical educators to protect and control women's physical education (Estler & Nelson, 2005).

As time passed, women's physical educators began shifting their focus and wanted to create a model of competitive college athletics for women. Despite limited opportunities for women during the mid-20th century, the first national championship for women was hosted through the Division for Girls' and Women's Sports (DGWS) by Ohio State in 1941 for the sport of golf (Willey, 1996). After several years of success, more colleges began to form women's sports teams that competed against other institutions in their region (Willey, 1996). Over a decade later in 1956, the Tripartite Committee was formed out of a need for a more formal structure for the women's golf tournament (Willey, 1996). The committee included representatives from the National Section of Girl's and Women's Sports (NSGWS), the National Association for Physical Education of College Women (NAPECW), and the Athletic Federation of College Women (AFCW). A year later in 1957, based on the recommendation of the Tripartite Committee, the National Joint Committee on Extramural Sports for College Women (NJCESCW) was formed to develop governance policies and procedures for the conduct of extramural events (Willey, 1996).

In 1966, the DGWS replaced the NJCESCW with the Commission on Intercollegiate Athletics for Women (CIAW) because there was a need for greater development and organizational strategies (Willey, 1996). Though, as interest in women's college athletics grew, so did the need for more financial support (Willey, 1996). Subsequently, the CIAW was transformed into the Association for Intercollegiate Athletics for Women (AIAW), an organization that required paying dues for membership. In 1972, the AIAW officially began with the mindset that it would do for women's programs what the NCAA was doing for men's programs (Estler & Nelson, 2005; Crowley, 2006; Yost, 2010). During their first year of membership, the AIAW had 386 member institutions and sponsored championships in seven

sports (Willey, 1996). It was an organization developed and governed by women for the purpose of exploring college athletic opportunities for women (Willey, 1996). While the AIAW's fight for the advancement of women in college sports continued throughout the 1970's, the organization eventually floundered due to the passing of a "championships proposal" at the 1981 NCAA Convention, which allowed NCAA Division I institutions to establish women's championships (Crowley, 2006; Yost, 2010). The AIAW took the issue to court but lost. As a result, The AIAW disbanded, and women's college athletics became a powerful component of the NCAA structure (Crowley, 2006; Yost, 2010).

Title IX. Title IX is a federal civil rights law that prohibits gender-based discrimination in education (Breaux, 2005; Kennedy, 2010; NCAA, 2012; Rhode & Walker, 2008; Willey, 1996). For the purpose of this study, however, Title IX specifically refers to issues of gender-based discrimination in college athletics.

Coincidentally, the passage of Title IX occurred in 1972, the same year the AIAW was founded (Carpenter & Acosta, 2005). However, the passage of Title IX did not occur without resistance. Institutions were not immediately required to conform to Title IX and were given a mandatory compliance date of 1978 (Carpenter & Acosta, 2005). Therefore, there were many college administrators who used this opportunity to fight against Title IX's implementation (Carpenter & Acosta, 2005). Specifically, male athletic administrators thought that Title IX would lead to the destruction of all college programs because monies spent on football and men's basketball would be wasted on women's programs (Willey, 1996). By the mid 1970's the NCAA spent over $300,000 fighting Title IX (Willey, 1996). This included Texas' Senator John Tower's proposal of the "Tower Amendment", which would exempt football and men's basketball from Title IX compliance (Willey, 1996). Nevertheless, through the determination in

part of the AIAW, Tower's proposal failed, and Title IX mandates remained in place (Willey, 1996).

In 1979, the Office of Civil Rights (OCR) issued a Policy Interpretation Manual to assist schools in understanding Title IX regulations. Based on this manual, Title IX compliance is centered on the following three distinct areas: 1) participation, 2) athletic financial assistance, and 3) other benefits, including the provision of equipment and supplies, scheduling, travel, tutoring, coaching, locker rooms, facilities, medical and training facilities and services, publicity, recruiting, and support services (NCAA, 2012; Women's Sport Foundation, 2015). Every institution receiving federal financial assistance must designate at least one Title IX coordinator to ensure institutions meet Title IX requirements in these three areas (NCAA, 2012).

Participation. It will be determined that a college's athletic program offers nondiscriminatory participation if it passes one of the following three tests: 1) intercollegiate level participation for male and female students are substantially proportionate to their respective undergraduate full-time enrollments 2) a history of continuing practice of expanding opportunities for the underrepresented sex; 3) fully and effectively meet the interests and abilities of the underrepresented sex (NCAA, 2012; Women's Sport Foundation, 2015). It is important to note that an institution does not have to pass each prong of this three part test to prove participation compliance. Each individual prong provides a valid way for a school to meet Title IX participation compliance (NCAA, 2012).

Financial assistance. The second area, financial assistance, requires that institutions that provide financial aid to students based on their athletic ability must award "substantially proportionate" dollars to male and female student-athletes (NCAA, 2012). To define "substantially proportionate" as it relates to financial aid, the OCR compares the actual

percentage of athletics-based aid awarded to men and women to the percentage of unduplicated male and female student-athlete participants (NCAA, 2012). This test of substantial proportionality is conducted on a case-by-case basis. However, if the difference between the athletic scholarship budget for men and women is greater than 1%, most likely an institution has violated the financial assistance requirement. (NCAA, 2012; Women's Sport Foundation, 2015).

Other benefits. The final area of compliance requires fair treatment and benefits between programs, and this is measured on the basis of the following eleven criteria: 1) locker rooms, practice and competitive facilities, 2) equipment and supplies, 3) scheduling of games and practice times, 4) publicity, 5) coaching, 6) travel and daily allowance, 7) academic tutoring, 8) provision of medical training facilities and services, 9) provision of housing and dining facilities and service, 10) recruitment of student-athletes, and 11) support services (NCAA, 2012; Women's Sport Foundation, 2015). Title IX does not require the budgets for male and female programs to be equal (NCAA, 2012; Women's Sport Foundation, 2015). However, it looks at the overall treatment of the male and female programs and ensures the overall benefits provided to each program are comparable (NCAA, 2012; Women's Sport Foundation, 2015).

Since its inception, Title IX has been a major factor in promoting women's athletics (Crowley, 2006; Edelman & Harrison, 2008: Yost, 2010). In their longitudinal study, Acosta and Carpenter (2014) found that prior to Title IX, there were only 2.5 women's sport teams per school. By 2014, that number grew to 8.83 women's teams per school, the highest number in history.

Differences between Varying Levels of Competition

The NCAA was officially established in 1906 with the goal of unifying college athletic rules and protecting student-athletes from the dangerous athletic practices of that period in time

(Crowley, 2006). Many of the dangerous practices were associated with football, which experienced numerous injuries and deaths due to the rugged nature of the sport (Crowley, 2006). Because of this, the public demanded that college football be abolished. This encouraged President Theodore Roosevelt to lead the charge in hopes of reforming the rules regarding the integrity and safety of college football (Crowley, 2006). An initial meeting had 13 colleges and universities come together to initiate changes in the football rules (Crowley, 2006). A subsequent meeting saw 62 institutions join forces to create the Intercollegiate Athletic Association of the United States (IAAUS) (Crowley, 2006). The IAAUS was officially established on March 31, 1906, and four years later, they voted to change the name to the National Collegiate Athletic Association (Crowley, 2006).

Throughout the history of the NCAA, there have been many defining moments (Crowley, 2006). In the 1950's, there were laws created regarding the tax statuses of the NCAA and its member institutions as well as the attempted implementation of the Sanity Code – NCAA legislation which addressed principles of conduct for amateurism, institutional control and responsibility, sound academic standards, athletic scholarships, and reforms for athletic recruiting (NCAA, 2015c). In the mid-1970's, the NCAA also created a rule prohibiting freshmen from being able to participate. However, with Proposition 48 in the late 1980's, that rule was overturned (Crowley, 2006). Major academic reforms also took place in the 1980's after the Knight Commission was formed to address eligibility rules and academic standards among member institutions (Crowley, 2006).

It was in 1973, though, when one of the most important moments in college athletics occurred (Crowley, 206). As college athletics continued to grow, the NCAA recognized the need to create separate divisions that had different levels of emphasis. Therefore, the NCAA

was divided into three separate legislative and competitive divisions – Division I, II, and III (NCAA, 2015c). Several years later, Division I members created subdivisions specifically for football. Division I-A and I-AA were later renamed the Football Bowl Subdivision (FBS) and the Football Championship Subdivision (FCS). Each membership classification of the NCAA creates its own rules governing personnel, eligibility, benefits, athletic scholarships, and playing and practice seasons. However, every NCAA program must affiliate its core program with one of the three divisions. Overall, there are currently 1,066 active member schools in the NCAA membership (NCAA, 2015c). There are 340 institutions in Division I, 290 in Division II, and 436 in Division III. However, despite the uniqueness of each individual division, the NCAA has a common set of core values that are ubiquitous throughout all three divisions. These include a balance between academics and athletics, integrity, a pursuit of excellence on and off the field of competition, and promoting diversity among student-athletes, coaches, and athletic administrators (NCAA, 2015c).

NCAA Division I. NCAA Division I is the highest level of college athletic competition. Division I schools are subdivided into three separate subdivisions based on the school's football sponsorship (NCAA, 2015d). Schools with football teams that are eligible to compete in the postseason bowl system are members of the FBS. Institutions that participate in the NCAA-sanctioned playoff system in football belong to the FCS. The requirements for FBS schools are different than the requirements for FCS schools. For example, FBS schools must sponsor a minimum of 16 varsity sports, schedule and play at least 60% of its football games against other FBS opponents, and average at least 15,000 in actual or paid attendance over a two-year rolling period at home football games (NCAA, 2015j). FCS schools only have to sponsor 14 sports, with at least two team sports for men and two team sports for women. Schools without football

are simply referred to as Division I institutions. There are currently over 167,000 student-athletes participating in Division I athletics, which is only about 35% of the total number of student-athletes participating at NCAA institutions (NCAA, 2015d). Division I student-athletes are allowed to receive full and partial athletic scholarships. However, an exception to this is seen at institutions that compete in the Ivy League (i.e. Harvard University, Princeton University, Davidson University, Cornell University, University of Pennsylvania, Columbia University, Brown University, and Dartmouth College) where athletic scholarships are not awarded despite their Division I status (Gwertzman, 1956).

NCAA Division II. The philosophy of NCAA Division II is to provide the student athlete with a comprehensive program of learning and development where student-athletes can compete at a high level, while still maintaining much of the traditional student-athlete experience (NCAA, 2015e). While Division II student-athletes are awarded athletic scholarships, not every one of the over 100,000 student-athletes competing at this level will actually receive a full athletic scholarship. Most, however, will receive a combination of athletic and academic aid along with having to use student loans and employment earnings (NCAA, 2015e). All Division II schools must field athletes in at least 10 sports, with male and female teams in one sport counting as two different sports. Institutional size ranges from less than 2,500 to over 15,000, with the average student enrollment being approximately 4,500 (NCAA, 2015e). Division II student-athletes experience six key attributes during their college experience, which include the following: 1) *learning*, multiple opportunities to broaden their knowledge and skills; 2) *balance*, emphasis on collective knowledge and the integration of skills; 3) *resourcefulness*, having a versatile skill set drawn from multiple experiences; 4) *sportsmanship*, exhibiting respect for fairness and courtesy while practicing ethical conduct towards others; 5) *passion*, having an

enthusiastic dedication and desire in effort; and 6) *service*, positively contributing to community. These are referred to as "Life in the Balance" (NCAA, 2015f). At the Division II level, the general philosophy is to maintain an atmosphere of learning and development while maintaining a high level of play in order to create a great student-athlete experience (NCAA, 2015f).

NCAA Division III. Of the three divisions of the NCAA, Division III is the largest division comprising of more than 170,000 student-athletes. However, the focus of these institutions is not athletics; rather, it is academics. Athletics, meanwhile, is a part of the academic mission of the institution. Therefore, they are the only NCAA division where athletic scholarships are not awarded from any member institution. Discover, Develop, and Dedicate is a part of the philosophy of Division III, and the primary focus for student-athletes is their education (NCAA, 2015g). In order to keep student-athletes focused on being students first, practice and playing seasons are shorter and student-athletes are treated like all other members of the general student body (NCAA, 2015g). The athletic program is considered an important part of the educational mission of the university, and the emphasis is on sportsmanship and positive contributions to society. These institutions must also field teams in 10 sports (NCAA, 2015g).

NAIA. The National Association of Intercollegiate Athletics (NAIA) is a completely separate governing body than the NCAA. The NAIA, previously known as the National Association of Collegiate Basketball, was originally established in part by Dr. James Naismith, the inventor of basketball, in 1937 solely as a college men's basketball championship for smaller colleges that were not invited to participate in either the NCAA or National Invitational Tournament (NIT) (Washington, 2005). In 1952, the NAIA was the first college athletics association to recognize historically black colleges by allowing them to participate in sponsored events and compete in men's and women's national championships (NAIA, 2015a; Washington,

2005). In 1957, the association expanded to include championships in golf, tennis, and track and field and officially changed the name to the National Association of Intercollegiate Athletics. By 1966, the NAIA had 517 members in comparison to the NCAA's 536 (Washington, 2005). However, between 1973 and 1996, the NAIA lost 196 members (Washington, 2005). Meanwhile, the NCAA increased its membership from 757 members to 996 members (Washington, 2005).

There are currently over 300 institutions and over 60,000 student-athletes who compete at the NAIA level (NAIA, 2015a). The NAIA consists of only one division in all sports except basketball where there are two divisions for both men and women (NAIA, 2015a). Member institutions are predominantly small private institutions with less than 5,000 students enrolled (Washington, 2005). Competition levels at NAIA institutions are comparable to NCAA Division II institutions, and student-athletes are eligible for full or partial athletic scholarships (NAIA, 2015b). Throughout competition, the NAIA focuses on five core values known as "Champions of Character": respect, integrity, responsibility, sportsmanship, and servant leadership (NAIA, 2015c).

Career Maturity and Athletic Identity of College Student-Athletes

Despite the differences in the NCAA Division I, II, III, and the NAIA, every student-athlete will have to transition away from competing collegiately at some point. At this time, most student-athletes will move into careers different than the sport they spent so many years perfecting, and a very small percentage will have the opportunity to continue competing professionally (NCAA, 2015a). There are two main concepts, however, that play an important role in how prepared every student-athlete will be for that transition away from college sports. They are *career maturity* and *athletic identity*.

Career maturity is defined as the degree of confidence a person has in his or her ability to make career related decisions (Betz, Klein, & Taylor, 1996; Finch, 2007). It is also related to understanding interests, capabilities, and values associated with preparing for future career possibilities (Brown & Hartley, 1998). One of the purposes of acquiring a college education is to become more valuable in the job market (Simons, Van Rheenen, & Covington, 1999). Therefore, many institutions have established career development programs to assist student-athletes with making transitions out of the college environment.

Athletic identity, meanwhile, is defined as the degree to which an individual identifies with the athlete role (Brewer, Van Raalte, & Linder, 1993). Researchers argue that the theory of athletic identity is critical in understanding the student-athlete's susceptibility to adjustment difficulties and career development barriers (Adler & Adler, 1987). Research also tells us that individuals who identify strongly with the athlete role may be less likely to explore other career, educational, and lifestyle options because of their intense commitment to athletics (Brown & Hartley, 1998).

Researchers contend that a high percentage of college student-athletes desire to pursue a career in professional athletics (Leonard, 1996; Ogilvie & Howe, 1986; Stanton, 1987; NCAA, 2015h). However, the reality is that few will ever compete beyond high school, and even fewer will move on to a professional career after competing collegiately (NCAA, 2015h). The numbers specifically pertaining to women's basketball show that only 0.9% of draft eligible players from the NCAA move on to a major pro career (NCAA, 2015h). Despite research that suggests that student-athletes identify strongly with their athletic identity the closer they are to graduation, many student-athletes will eventually have to choose career paths different than their current athletic ambitions (Adler & Adler, 1987). Consequently, college athletics has become a

multimillion dollar industry with student-athletes who generally have little to no desire to succeed academically (Adler & Adler, 1985, 1987, 1991; Blann, 1985; Brown & Hartley, 1998; Brewer, Van Raalte, & Linder, 1993; Duderstadt, 2000; Lally & Kerr, 2005; Martens & Cox, 2000; Sparkes, 1998).

A majority of the research pertaining to athletic identity and career maturity of student-athletes focuses on the revenue making sports of football and men's basketball at the NCAA Division I level (Van Rheenen, 2011). Hinkle (1994) found that football and men's basketball student-athletes need guidance and assistance in personal and career development during college. McKinney (1991), meanwhile, found that student-athletes who participate in revenue producing sports are significantly less involved in career decision making than non-athletes. Therefore, they have problems balancing between their athletic and academic roles, which leads to serious challenges when faced with athletic retirement and the transition away from sport. For these student-athletes, the mere existence of professional sports creates a belief that "going pro" in athletics could be a reality. Therefore, student-athletes in these sports focus on their sport more than their future career because for them, it is one and the same.

Statement of the Problem

Kirk and Kirk (1993) argue that many student-athletes have spent their entire lives focusing on their athletic careers. Therefore, there has been a lack of concern over the personal, academic, and career development aspects of college life by student-athletes. As research suggests, student-athletes who identify strongly with their athletic role tend to ignore exploring other career and educational ambitions unrelated to their sport (Baillie & Danish, 1992; Pearson & Petitpas, 1990). Consequently, many student-athletes face difficulties when these personal development skills are lacking or have not been established, particularly in the area of career

maturity (Chartrand & Lent, 1987; Sowa & Gressard, 1983; Remer, Tongate, & Watson, 1978; Taylor & Ogilvie, 1994, 2001).

The research detailing the athletic identity and career maturity of student-athletes at the NCAA Division I level suggests that student-athletes experience low levels of career maturity (Murphy, Petitpas, & Brewer, 1996; Kennedy & Dimick, 1987; Sowa & Gressard, 1983; Smallman & Sowa, 1996). However, these results cannot be generalized to the entire body of college student-athletes because trends related to NCAA Division I student-athletes do not necessarily coincide with the philosophies of student-athletes at other divisions or associations, namely NCAA Division II, III, and the NAIA. Specifically, there is a gap in the literature that investigates the relationship of athletic identity and career maturity of female student-athletes at different competition levels. As basketball is arguably the most recognizable women's professional team sport in the United States, the study will be delimited to that sport.

The realities of "going pro". Since the reality of competing professionally did not always exist for women, problems effecting football and men's basketball were not an issue for women's sports. Now that women's basketball has sustainable professional leagues (e.g. the Women's National Basketball Association (WNBA) and professional European leagues), the possibility of a professional basketball career is greater. It would seem that the more likely one qualifies for professional athletic careers, the more likely one would be to focus on athletics and therefore have a strong athletic identity and low levels of career maturity. On the other hand, if a student-athlete competes on a team at a lower NCAA division or for the NAIA, it would stand to reason that they would have higher levels of career maturity and lower levels of athletic identity since professional athletic opportunities would most likely be secured by student-athletes competing at the highest level, NCAA Division I. While this is the assumption, little research

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exists that actually investigates the athletic identity and career maturity of women's basketball student-athletes at different competition levels.

Until recently, tenable professional athletic opportunities in the United States have been primarily only offered to men. In 1996, however, the WNBA became a reality and increased the number of opportunities for women's college student-athletes to pursue careers in professional basketball after graduating. Prior to this, the opportunities for women to continue their athletic careers in basketball were limited due to the early struggles and failures of the Ladies Professional Basketball Association (LPBA), the Women's Professional Basketball League (WBL), the Women's Sports Association Professional Basketball League (WSAPBL), the Women's World Basketball Association (WWBA), the Liberty Basketball Association (LBA), and the American Basketball League (ABL) (Edelman & Harrison, 2008). Nevertheless, the development of the WNBA has changed the landscape of American sports. Consequently, what primarily only affected the revenue making sports of college football and men's basketball is now affecting women's college basketball at all levels – the possibility of pursuing a professional basketball career.

In 2006, the WNBA began their eleventh season of competition. The team rosters that year included 175 females from all over the world. Of that number, 156 players attended universities and colleges that competed at both the NCAA and NAIA levels (Isaacson, 2006). Furthermore, additional data from the NCAA show there were 36 draft slots during the 2013 WNBA draft (NCAA, 2015a). Of those slots, 32 went to NCAA Division I players and 4 were international players who did not attend a U.S. institution (NCAA, 2015a). It was also determined that an additional 139 former NCAA women's basketball student-athletes played

internationally during 2014 (129 from Division I, 8 from Division II, 2 from Division III, the

NAIA did not report any numbers) (NCAA, 2015a).

DiMauro (2014) indicates that the top WNBA players earn about $110,000 a year. With

endorsement deals, that number can increase to as much as $200,000 (Isaacson, 2006). If

women choose to play overseas, the best players can make over $1,000,000 (Fagan, 2015).

While salaries remain an issue in the WNBA and are far below their male counterparts who

average $3.9 million a year in the National Basketball Association (NBA) (Kaba, 2011), it is

evident that viable opportunities now exist for women to compete professionally and get paid a

respectable salary to do so (DiMauro, 2014). However, the question surfaces - do these

opportunities for women now stymie their development in regards to seeking other occupational

opportunities while in college?

This change in the women's basketball environment has not only increased the number of

women's basketball student-athletes who hope to follow professional athletic careers, it has also

increased the potential number of student-athletes who strongly identify with their athletic roles

throughout their college careers instead of finding a balance between athletics, academics, and

personal development. According to the NCAA (2015a), there were an estimated 16,000

women's basketball student-athletes competing at the NCAA Division I, II, and III levels during

the 2013-14 academic year. Meanwhile, during this same time period, the NAIA housed 3,256

women's basketball student-athletes (A. Grosbach, personal communication, June 5, 2015).

However, it is estimated that less than 1% of these student-athletes continue into a career in

major professional basketball (NCAA, 2015h). Furthermore, those who do make it, only have a

professional career that lasts 3-4 years on average (McCarthy, Voos, Nguyen, Callahan, &

Hannafin, 2013).

Academic performance of women's basketball student-athletes. Research shows that student-athletes display lower levels of career maturity than their non-athlete peers (Martins & Cox, 2000). However, Edelman and Harrison (2008) contend that female student-athletes graduate from college at a higher rate than any other group in American education. Moreover, Kaba (2012) reports that among professional sports in 2006 in the United States, WNBA players had the highest proportion of players with at least a bachelor's degree from U.S. institutions. Therefore, the research pertaining to athletic identity and career maturity of men's basketball and football student-athletes may not be completely applicable to women's basketball student-athletes.

The Institute for Diversity and Ethics in Sport (TIDES) (2014) reports that when comparing the teams that were selected for the 2014 NCAA Division I men's and women's basketball tournaments, student-athletes on women's basketball teams graduated at a higher rate (87%) than student-athletes on men's basketball teams (72%). When dissecting the data specifically by race, White female basketball student-athletes on tournament teams graduated at 97% compared to 87% for African-American female student-athletes (TIDES, 2014). The study also reported that of the women's and men's tournament teams, only one women's team fell below the NCAA Academic Progress Rate (APR) requirements of 930 compared to eight men's teams that fell below the mark (TIDES, 2014).

Academic Progress Rate (APR). The APR, which was officially adopted by the NCAA in 2004, is a four year average of academic performance that rewards athletic programs for student-athlete retention and eligibility (Crowley, 2006; NCAA, 2015i). Each student-athlete can earn four points per year, two per semester (NCAA, 2015i). One point is awarded for remaining eligible and the other is for remaining at his or her institution (NCAA, 2015i). If a

student-athlete is both eligible and retained for both semesters, that team is awarded 4/4 total points (NCAA, 2015i). Each scholarship athlete on the roster is taken into consideration when calculating a team's APR for the year (NCAA, 2015i). The total points earned is divided by the total possible points and then multiplied by 1000 to equal the team's APR (NCAA, 2015i). The current team requirement is 930 (NCAA, 2015i). Any team falling below that requirement can be subjected to penalties including loss of scholarships and post season bans (NCAA, 2015i).

Purpose of the Study

The purpose of this study is to examine the relationship between the athletic identity and career maturity of women's basketball student-athletes and identify elements that may affect these variables such as competition level, year in school, race, socioeconomic status, or professional sport aspirations. By determining the relationship and identifying possible obstacles to success, athletic administrators can develop ways to further assist these student-athletes in order to ensure the greatest degree of success after completing their college careers and graduation.

Research Hypotheses

The results of this study will form the basis for understanding the relationships among athletic identity and career maturity in women's basketball student-athletes. Therefore, this study will attempt to test the following hypotheses:

1. **Null Hypothesis**: There is no correlation between the athletic identity and career maturity of women's basketball student-athletes.

2. **Null Hypothesis**: There is no statistically significant difference in career maturity or athletic identity based on a women's basketball student-athlete's level of college competition.

3. **Null Hypothesis**: There is no statistically significant difference in career maturity or athletic identity based on women's basketball student-athlete's year in school.

4. **Null Hypothesis**: There is no statistically significant difference in career maturity or athletic identity based on a women's basketball student-athlete's race.

5. **Null Hypothesis**: There is no statistically significant difference in career maturity or athletic identity between women's basketball student-athletes based on socioeconomic status.

6. **Null Hypothesis**: There is no statistically significant difference in career maturity or athletic identity between women's basketball student-athletes who plan to pursue a professional basketball career and those that do not.

Definitions

Student-Athlete: A current undergraduate participant on a team in an organized NCAA Division I, Division II, Division III, or NAIA university sponsored sport.

Career Maturity: The degree of confidence a person has in his or her ability to make career related decisions. It is the realistic growth of one's ability to participate in a given career as measured by the Career Maturity Inventory form (Crites, 1978).

Athletic Identity: The degree to which an individual identifies with the athletic role as measured by the Athletic Identity Measurement Scale (AIMS) (Brewer, Van Raalte, & Linder, 1993).

Competition Level: The level of competition in which a school chooses to participate. The four major competition levels for four year institutions include the NCAA Division I, II, III and NAIA.

NCAA: The National Collegiate Athletic Association is a governing body that creates and enforces rules of competition and academics for member institutions (NCAA, 2015c).

NAIA: The National Association of Intercollegiate Athletics serves institutions with enrollments of less 2000. The NAIA currently has over 300 member schools and 60,000 student-athletes. Institutions choose the number of sports, and athletic scholarships are available (NAIA, 2015a).

NCAA Division I: Division I is the highest level of college athletics under the umbrella of the National Collegiate Athletic Association. Division I schools must sponsor a minimum of seven male sports and six female sports or six male sports and eight female sports. Both full and partial athletic scholarships can be awarded to student-athletes (NCAA, 2015d).

NCAA Division II: Division II institutions must sponsor at least five sports for men and five for women, or four for men and five for women. There must be two team sports for each gender, and each playing season must be represented by each gender. Division II institutions tend to be smaller public or private institutions. Athletic scholarships can be awarded to student-athletes based on economic need. All Division II sports are "equivalency" sports, which mean there are restrictions placed on the total financial aid a school can offer in a given sport to a set number of full scholarships. Therefore, scholarships can also be divided among several prospective student-athletes (NCAA, 2015e).

NCAA Division III: Division III is a branch of the NCAA that includes colleges and universities that do not offer athletic scholarships to their student-athletes. Athletics is

seen as a non-revenue making, extracurricular activity. Therefore, only financial and academic awards are permissible. Schools must sponsor at least five men's and five women's sports. Schools usually vary in size and a high priority is placed on academics (NCAA, 2015g).

Significance of the Problem

The current study investigates several relevant aspects of a student-athlete's development in college. The purpose of the current study is to explore the relationship of athletic identity and career maturity in women's basketball student-athletes at different competition levels. These variables are important to analyze because of their impact on student-athletes during and after their college careers. By determining the relationship between the athletic identity and career maturity of women's basketball student-athletes at different levels, athletic administrators can begin to design and implement programming that helps women's basketball student-athletes prepare for career opportunities outside of their sport.

Researchers argue that the transition away from college athletics may elicit difficulties, especially when there is a gap in the development of life skills such as career maturity (Chartrand & Lent, 1987; Sowa & Gressard, 1983; Remer et al., 1978; Taylor & Ogilvie, 1994, 2001). Therefore, it is believed that the results will also increase the efficiency and effectiveness of assistance provided to women's basketball student-athletes at all levels. The information provided will also help college coaches gauge the type of resources needed to assist their student-athletes with preparing for the transition away from sport into the "real world". College coaches could also use this information as a recruiting tool by explaining how their institutions plan to address athletic identity and career maturity issues and prepare student-athletes for life after sports.

The significance of this study on college faculty and students who do not fall in the category of student-athletes is also substantial. In their study, Wininger and White (2008) examined to what extent student-athletes felt as though they were being treated as "dumb jocks". The researchers found that student-athletes thought their peers had much lower academic expectations for them based on their status as a student-athlete. However, they also discovered that student-athletes felt that professors and other students were more willing to help them because they were student-athletes. This is a crucial finding, which makes the results of this study even more significant. By determining the relationship between the athletic identity and career maturity of women's basketball student-athletes, faculty members may be able to better relate to and understand the mindset of a women's basketball student-athlete, which could help them find ways to better assist student-athletes in becoming more successful students.

This study will also identify which student-athletes may have the most trouble transitioning from their college athletic careers to professional careers based on basic demographic information so more attention can be spent helping them with their transition. The more information that is gathered on a student-athletes level of career maturity, the sooner interventions can be implemented that can potentially aid in generating higher levels of success for these students.

Chapter 2: Review of Literature

With the growth and expansion of sustainable professional women's basketball leagues across the globe including the WNBA, the possibility of female student-athletes pursuing a professional basketball career is greater. However, as professional opportunities for women in sports continue to increase, the threat of female student-athletes solely identifying with their athletic role possibly also increases. The potential problems that can occur due to student-athletes not being prepared for a life outside of sports can ultimately be detrimental to the success of higher education at all levels.

In comparison to the other major professional sports in the United States (National Football League, National Basketball Association, Major League Baseball, National Hockey League) the WNBA is fairly young (NCAA, 2015a). Since the reality of competing in a viable professional league did not exist for women until the late 90's, most of the research pertaining to athletic identity and career maturity primarily focused on the revenue producing sports of football and men's basketball at the NCAA Division I level (Van Rheenen, 2011). Research shows that male student-athletes need guidance and assistance in personal and career development during college (Hinkle, 1994). In addition, it is argued that student-athletes who participate in revenue producing sports are significantly less involved in career decision making than non-athletes, which leads to major challenges when faced with transition away from college athletics (McKinney, 1991). There is a dearth of literature, however, that looks at the athletic identity and career maturity of women's basketball student-athletes.

Recent studies indicate that of the over 1,000 draft eligible women's basketball student-athletes competing at NCAA Division I institutions in 2013, 15% competed professionally in the WNBA or internationally (NCAA, 2015a). Since there are now more opportunities for female

student-athletes to compete professionally, it is important to understand how the athletic identity and career maturity of female student-athletes are affected by different variables.

Therefore, the purpose of this study is to examine the relationship between the athletic identity and career maturity of women's basketball student-athletes. By identifying possible obstacles to developing career maturity, more strategies can be implemented to assist these student-athletes with successful transitions into viable careers after their college athletic careers are completed.

The second chapter of this dissertation provides a review of literature that guided this research. In order to provide a sense of the important variables that shape athletic identity and career maturity in women's basketball student-athletes, several relevant factors are addressed. The review begins by examining identity theory and the development of athletic identity. This is followed by an investigation of the development of career maturity and how it is affected by college athletics. Subsequent sections investigate the importance of athletic identity and career maturity on student-athlete transition from college sport.

Identity Theory

The concept of identity theory dates back to work of Mead (1934), who argued that our identities are products of our social interactions. This paradigm was later coined symbolic interactionism, which states that people derive meanings for the things they encounter throughout their lives based on their social interactions with those things (Blumer, 1969; Cooley, 1902; Mead, 1934). Stryker (2007) states that identity theory shares assumptions that human action and interaction are vitally shaped by interpretations or definitions of the situations of action and interaction, and that interpretations and definitions are based upon shared meanings developing out of interactions with others. However, those shared meanings can change because

each individual's interaction within his or her social environment is constantly changing. Therefore, it is believed that identities are self-cognitions tied to roles, and through roles, to positions in organized social relationships (Stryker & Burke, 2000; Stryker, 2007). Stated more simply, a person's identity is how that person thinks of herself in relation to whatever particular social role she may have.

Prior to the work of Mead (1934) another forerunner in the concept of self was Cooley (1902). Cooley's "Looking Glass Self" concept states that a person shapes her identity based on what she believes others think about her. The theory of the Looking Glass Self has three major components (Shaffer, 2005). First, one must imagine herself as others must see her. Second, one must imagine what others must think of her. Last, and most important, one develops her self-concept from the perceived judgment of others. However, Cooley (1902) argues that one's self-concept is not only based on the mere reflection one sees back in the mirror. Rather it is others' perception of the reflection that determines the development of self. Researchers further expanded on this idea of the Looking Glass Self by theorizing that social interaction plays a pivotal role in the development of self, and these interactions lead to behavioral expectations by the individual and the people with whom he or she is engaging through social interactions (Coser, 1989). As a result, when behavioral expectations and identities do not coincide, there is a higher likelihood that the people involved in the interaction will act differently than what is expected.

Overall, the foundational premise of the identity theory is that one develops the concept of self through the process of interactions with others and the social world (Mead, 1934; Cooley, 1902; 1964). Subsequently, since people experience a variety of social interactions and

situations, each person develops a concept of self that involves multiple identities rather than just one single identity.

Consequently, identity theory proposes the concept of role-identity salience, which posits that roles that are harder to abandon have a greater possibility of being implored in any given situation (Adler & Adler, 1987). The concept of identity salience is explained from the multifaceted view of self. Burke (2006) observed that persons are seen as having multiple identities. Therefore, the concept of self is theorized as a combined set of discrete identities, with persons potentially having as many identities as there are social interactions in which they participate. For example, just as a man could develop identities of a husband and father at home, he could have equally important occupational identities as a doctor or salesperson at his job. Nevertheless, there is disagreement on whether or not each identity a person carries is equally salient (Stryker, 2007).

Stryker (2007) defines identity salience as the "likelihood that a given identity will be involved or called into play in a variety of situations" (p. 1092). He posits that the more prominent a particular identity is, the more likely it will surface during social interactions even if that identity is not the appropriate identity for a given situation. As the salient identity becomes stronger, behaviors associated with that identity will happen more frequently and could potentially lead to identity foreclosure or role conflicts.

Several studies provide evidence that identities can serve as predictors to behaviors just as much as behaviors can influence identity salience. In their study of NCAA Division I men's basketball student-athletes, Adler and Adler (1987) discovered that as student-athletes began to identify with their life as a college student-athlete, each of their individual identities experienced changes. The more the student-athletes identified with their role as an athlete, behaviors linked

to that role became more prominent. Similarly, as their student role became less important, behaviors associated with that role decreased. Student-athletes began to spend less time focusing on the academic aspects of their college careers and began to focus solely on their athletic endeavors.

Most of the literature related to identity theory concerning athletes uses Eriksonian developmental theory (Shaffer, 1985). A major component of Erikson's theory pertains to the development of ego identity. Ego identity is defined as the conscious sense of self one develops through social interactions. According to Erikson (1956), an individual's ego constantly changes due to new experiences and social interactions with others, which begins in childhood and continues throughout a lifetime. There is also support in the literature that social interactions will indicate which identities are more salient in each individual's identity hierarchy, and in turn, these interactions can serve to either validate or reject certain identities (Adler & Adler, 1991).

In a follow up to their 1987 study, Adler and Adler (1991) performed a qualitative longitudinal study that examined student-athletes over a four year period. The researchers concluded that student-athletes spent the most time with individuals associated with their athletic role because they received more validation from this role than either their academic or social roles. Eventually, the student-athletes' athletic roles began to affect their behaviors in the classroom and other social settings. Thus, less time was spent on academic requirements or social interactions that did not have anything to do with their roles as college student-athletes. Therefore, it is evident that the social validation they received as basketball student-athletes encouraged them to restructure their identity hierarchy.

Stryker (2000), meanwhile, argues that individuals identify with certain groups because of a common identity and shared belief system. It is through repeated activities within a group

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that personal, role-based identity is established, and collective identity is reinforced. Through these symbolic social interactions, personal identity is shaped in favor of the group standard.

Burke (2006) adds that everyone has multiple identities depending on their social interactions, and each of these identities can be harmonious or adversarial. However, this all depends on their individual interactions. Consequently, one identity can take precedence over another, and the identity that takes precedence most likely controls behavior (Stryker, 2007). In the case of student-athletes, the two roles that are fighting for control are the roles of being a student and an athlete.

Role conflict – student vs. athlete. Keller (1975) contends that individuals are constantly exposed to a variety of expectations from both themselves and others as they carry out their different identities. As a result, these expectations may cause role conflict for the individual. Role conflict is conflict that occurs when individuals find themselves pulled in different directions due to the multiple identities that they hold (Crossman, 2013; Erikson, 1956; Goode, 1960; Macionis & Gerber, 2010; Settles, Settler, & Damas, 2002). For instance, when the roles are associated with two different statuses, it is considered status strain (Abbott, 1981). However, when the conflicting roles are both associated with the same status, it is considered role strain (Marks & MacDermind, 1996). In the case of college athletics, there are a number of studies pertaining to role conflict faced by college student-athletes (Adler & Adler, 1985; 1987; Sack & Thiel, 1985; Settles et al., 2002). In these instances, college student-athletes experience status strain because there is conflict between their roles as college students and as athletes. However, there is a belief that student-athletes vary in how much they view their academic and athletic role identities as separate from and interfering with each other (Settles et al., 2002).

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Throughout the role-conflict literature, there have been various studies pertaining to the academic and athletic roles of college student-athletes. Dubois (1978) found no significant relationship between athletic participation and academic achievement, while Shapiro (1984) did. Meanwhile, studies by Purdy, Eitzen, and Hufnagel (1982) and Sack and Thiel (1979) showed a negative relationship between the two. In a follow-up to their earlier research, Sack and Thiel (1985), found that a student-athlete's level of competition is closely related to student-athlete role conflict. Student-athletes in NCAA Division I experienced greater role conflict than those in Division II or III. Gender also played an important role with males experiencing more conflict than females. They also found that an athlete's academic background does not appear to be related to the experience of role conflict. Student-athletes who are well prepared academically are just as probable as those who are inadequately prepared to feel the pressures associated with balancing both the student and athlete roles.

While the findings have been somewhat inconsistent, Snyder (1985) states that athletic participation can enhance an individual's academic performance in the following ways: 1) an individual has an increased interest in school because of athletics; 2) an individual focuses on academics in order to maintain athletic eligibility; 3) success in athletics may spill into higher academic achievements; 4) there is more interest taken in the student-athlete's academic performance by coaches and parents; and 5) athletic qualities such as hard work and achievement spill over into the academic realm.

On the other hand, Synder (1985) also argues that athletic participation detracts from academic success in the following ways: 1) the athletic role requires a vast amount of time and energy that takes away from the focus on academics; 2) the academic role may be corrupted in order to maintain athletic eligibility by providing preferential treatment to athletes; 3) despite not

progressing towards an actual degree, athletes may be encouraged to take easy courses to maintain eligibility; 4) unrealistic expectations of a professional athletic career may detract from academic progress; and 5) the athletic qualities such as hard work and achievement may not necessarily relate to positive achievement in the classroom.

Chartrand and Lent (1987) argue that two of the main issues that college counselors normally address in student-athletes are role conflict from being both a student and an athlete and, secondly, transitioning into life after competition. However, rather than provide ways to address this issue, the researchers chose to explore Danish and Hale's (1981) educational developmental framework, which they argued could potentially help them improve the knowledge of student-athlete development and provide a logical foundational basis for proactive intervention. Danish and Hale's (1981) educational developmental framework not only focuses on the student-athlete's athletic abilities, but also on the individual as a whole and on their changing needs over time. The model emphasizes four areas that include: 1) the athlete's desire to acquire skills; 2) his or her capacity to learn; 3) the counselor's role as a teacher and mentor; and 4) the applicability of acquired skills to a broader repertoire.

It can also be argued that role-conflict can lead to a variety of behavioral outcomes or coping mechanisms (Sack & Thiel, 1985). In a qualitative study of 12 college male student-athletes and 12 male non-athletes, Stein and Hoffman (1978) found that most student-athletes felt that the pressures associated with their athletic roles stopped them from exploring other interests throughout their college careers. This resulted in difficultly fulfilling all of their roles including athlete, student, and friend.

There are multiple cases for and against a student-athlete's commitment to academics and athletics. Research shows that student-athletes identify strongly with their academic career

ambitions earlier in their college careers and begin to identify more with their athlete role the closer they are to graduation due to the following: 1) the overwhelming demands of the athletic role; 2) a peer subculture that devalued academics; 3) a number of failures and frustrations in the classroom; and 4) a scarcity of support from others who were supposed to reinforce the academic role (Adler & Adler, 1987). In their study, Adler and Adler (1987) found that most of the student-athletes they observed began their college careers with positive attitudes towards academics, even though their athletic role was unquestionably their most salient identity. Although this was the case, their academic role was still a very critical dimension of their identity, which was reflected by their class attendance and commitment to doing well in classes. However, as time elapsed and the demands of academics and athletics began to create conflict, the student-athletes ceased attending classes regularly, diminished their efforts to create relationships with professors, and shifted their energy to simply maintaining eligibility by changing majors to a "creative alternative" (p. 451). In many instances, student-athletes have to deal with a tremendous amount of pressure to win and attract spectators, which requires an enormous commitment on the part of the athletes that can seriously interfere with their commitment to being a good student (Coakley, 1982). Thus, in order to resolve their role-conflict between being a student and an athlete, student-athletes choose to realign, reduce, or drop their academic role completely. By doing so, student-athletes make the role system manageable by allocating energies and skills in order to reduce role strain into manageable sections (Goode, 1973; Sack & Thiel, 1985).

According to Robinson (2013), heavy demands of the athletic role conflict with other important roles. This causes issues related to limited peer relationships, deficiency of career and social development opportunities, and limited self-concept and basis for self-worth. Researchers

suggest that many student-athletes either lack the time or interest to undertake career planning or view such preparation as a threat to their professional athletic career aspirations (Murphy, Petitpas, & Brewer, 1996).

The literature is prevalent with issues pertaining to the role conflict of being a student and an athlete. However, when role conflict specifically pertains to women in sports, not only must women deal with the role conflict associated with being a student-athlete, they must also address the conflict created when the expectations of being an athlete collide with the expectations of being feminine (Allison, 1991). In his study, Lance (2004) focused on role conflict pertaining to women when he examined differences in gender as it relates to role conflict in college student-athletes. From the study, Lance concluded that over 55% of the student-athletes surveyed thought that is was difficult to meet both academic and athletic demands. He also found that females scored significantly higher on the role conflict index than males, suggesting that females experience more status strain because the societal expectations of being a female are incompatible with the behavioral expectations for an elite college student-athlete. However, when comparing male student-athletes in the revenue sport of men's basketball to female student-athletes in the non-revenue sport of women's basketball, the results were contrary with male student-athletes perceiving more role conflict than female student-athletes. Lance suggests that the reason for this is because of the revenue producing potential of men's basketball. He argues that due the commercialization of men's basketball, college coaches are more likely to be excessive in their demands on the time and energy of male student-athletes.

Due to the lack of focus on female athletics based on their revenue making status, there is a dearth of literature that specifically investigates female student-athletes and their struggles with role conflict. Research indicates that role conflict, in general, poses problems of adjustment for

all individuals, and those with high levels of role conflict also experience lower levels of career maturity and satisfaction (Kahn, Quinn, Snoek, & Rosenthal, 1964). Therefore, further research needs to be conducted in order to specifically answer the questions related to female student-athletes.

Athletic Identity

Athletic identity is defined as the degree to which an individual identifies with the athlete role (Brewer et al., 1993). Researchers argue that the theory of athletic identity is critical in understanding the student-athlete's susceptibility to adjustment difficulties and career development barriers (Adler & Adler, 1987). Research also shows that individuals who identify strongly with the athlete role may be less likely to explore other career, educational, and lifestyle options because of their intense commitment to athletics (Brown & Hartley, 1998).

A student-athlete's identification with the sports role can begin as early as childhood and continue through adolescence into adulthood (Brown & Hartley, 1998; McPherson, 1980; Ogilvie & Howe, 1986). During this process, the athletic role is affected by experience, various social relationships, and involvement in sports activities (Cornelius, 1995). Interactions with family members, friends, coaches, teachers, and even the media are very influential in developing athletic identity (Heyman, 1987). However, if athletic identity is forged during early childhood and adolescence years, the negative results may be that the importance of a quality education and career development will be undervalued (Brown & Hartley, 1998; Harris, 1993).

Robinson (2013) argues that many studies on athletic identity fail to classify the various stages of athletic identity, thus failing to help others completely understand the dichotomous relationship between being a student and an athlete. Robinson posits that athletic identity is related to the Black identity stages defined by Cross, Parham, and Helms (1991). Based on this

theory, there are five levels of athletic identity that student-athletes experience including the following: total athletic stage, god athletic stage, reality stage, limbo stage, and the focus stage.

During the total athletic stage, the student-athlete is usually competing in Amateur Athletic Union (AAU) sports or is in their first year of college. The individual has high beliefs of playing professional sports and is solely committed to athletics. In this stage, the student-athlete sees college only as a doorway to competing professionally.

The god athletic stage includes student-athletes in their second or third year of college. Student-athletes in this stage have been successful in their first few years of college and truly believe they will play professionally, thus, choosing not to focus on other areas of interest. Student-athletes at this stage believe they are above the law and can do anything they want.

The next stage, reality, sets in for student-athletes typically in their last year of college. This is where they realize that playing professionally probably will not happen. At this stage, student-athletes attempt to focus on academics.

The subsequent stage is considered limbo. This is where the student-athlete transitions away from college athletics and looks to continue playing sports overseas or on semi-pro contracts. During this stage, many athletes experience mood swings because they no longer have that feeling of success and self-worth gained from college competition.

The final stage of athletic identity is the focus stage. This occurs when the athlete focuses on and achieves long term goals. By doing so, student-athletes are able to focus on outside interest even while participating in sports. At this stage, individuals find themselves more well-rounded making the transition from sports into the "real world" much easier.

Consequently, there are both positive and negative consequences associated with strong athletic identity. Brewer et al. (1993) explain that one potential benefit of identifying with the

athlete role is the development of a salient self-identity. Petitpas (1978) posits that participation in athletics presents opportunities for an individual to not only develop athletic skills but also to engage in social interaction, measure their abilities, and increase confidence. Fox and Corbin (1986) and Kendzierski (1988) found that individuals who greatly identified with sports and physical activity had a greater commitment to exercise. Horton and Mack (2000) state that athletic identity is also associated with enhanced body image, decreased anxiety, and greater self-confidence.

Conversely, many of the risks involved in maintaining a strong athletic identity pertain to difficulties associated with sport career transitions and athletic career termination (Brewer et al., 1993; Pearson & Petitpas, 1990; Petitpas, 1978). In their study of former Canadian Olympic athletes, Werthner and Orlick (1986) report that athletes who had alternative areas to direct their time and energies were more effectively prepared to transition away from their sport than athletes who did not have an alternative area. Kleiber, Greendorfer, Blinde, and Samdahl (1987) showed that student-athletes who suffered a career ending injury had lower post college life satisfaction than student-athletes who did not suffer a career ending injury. There is also a threat that individuals with a strong athletic identity will be vulnerable to emotional setbacks when dealing with injury that impairs their ability to perform in their sport. The thought is that when an individual suffers an athletic injury, specifically one that is potentially career ending, that individual will struggle with identifying their self-worth and self-identification (Brewer et al., 1993).

Although, a review of literature indicates that the level of athletic identity a student-athlete displays is useful in understanding a student-athlete's risk for adjustment difficulties and development barriers (Brown and Hartley, 1998), current research has not investigated how this

relationship pertains specifically to female student-athletes at different competition levels. However, when comparing the differences between the levels of athletic identity displayed between males and females, the results have been mixed. Wiechman and William (1997) found that males had stronger athletic identities than females, and they also had higher expectations of playing at the college/professional level. Meanwhile, there are other studies that conclude that athletic identity is not affected by gender (Groff & Zabriskie, 2006; Hoiness, Weathington, & Cotrell, 2008; Fraser, Fogarty, & Albion, 2010).

Due to the changing landscape of professional sports opportunities for women in the United States, it is necessary to conduct more research that gives a better understanding of the issues faced by female student-athletes during their college careers. This includes understanding the process of career maturity and how it relates to athletic identity in college student-athletes. However, before career maturity can be developed, there must be a comprehension of the general theory of maturity.

Maturity

In psychological literature, maturity is not defined by one's age. Rather, it is has to do with a person's ability to react and respond to a given situation in the appropriate way (Jagadeesh, 2012; Ryfe, 1989; Wechsler, 1950). It is not instinctive but is learned, and the way a person makes decisions or deals with crisis are good clues about their level of maturity (Weschler, 1950). Wechsler adds that different abilities emerge and mature at different times and contends that developing maturity comes from learning to cope with different life experiences. Ryff (1989), meanwhile, posits that maturity is important because it emphasizes a clear comprehension of life's purpose, a sense of directedness, and intentionality. In general,

there are various types and theories of maturity that can branch off in many directions. For the purposes of this study, however, the focus is on career maturity.

Career maturity theory. Career maturity, which was originally called vocational maturity, was introduced as a part of the developmental approach to career research by Super (1955). It is defined as "an individual's readiness to cope with the developmental tasks with which he or she is confronted because of his or her biological and social developments, and because of society's expectations of people who have reached that stage of development" (Super, 1990, p. 213). Super (1957) believed that each individual's vocational development occurs over a series of stages defined as the life-span, life space theory. He further explains that the readiness of an individual refers to both cognitive and attitudinal components. The attitudinal dimension refers to an individual's attitudes and feelings about making a career choice and whether they continue to pursue that career as they transition into the work force. The cognitive dimension, meanwhile, signifies an individual's awareness of a need to make career related decisions and their comprehension of their vocational preferences (Crites, 1976). Career maturity theory states that an individual should be able to accomplish tasks that are appropriate for his or her stage of development (Brown & Lent, 2005). However, career maturity is not only focused on the individual's development tasks. It is also focused on the behavior an individual demonstrates as he or she deals with tasks during different stages of development (Zunker, 2002).

Throughout the career maturity literature, researchers present several operational definitions that help clarify the career maturity theory. *Career development* is the process of growth throughout various life stages (Bandura, 1977). *Self-efficacy* refers to a person's beliefs in his or her ability (Crites, 1978). *Career Decision-Making Self-efficacy* is a person's belief that

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he or she can fulfill the necessary tasks involved in making career choices (Taylor & Betz, 1983). *Career locus of control* is the extent to which people believe themselves to be in control of the outcomes affecting their life (Rotter, 1966). *Career planning* is the degree to which individuals establish intelligible coherent plans through investigation and experiences in the world of work (Super, 1957).

Crites (1978) further developed Super's (1957) vocational maturity theory by applying Bandura's (1977) self-efficacy theory to his model of career maturity. Bandura's self-efficacy theory is "based on the principal assumption that psychological procedures, whatever their form, serve as a means of creating and strengthening expectations of personal efficacy" (Bandura, 1977, p. 193). Hence, Bandura proposed that the self-efficacy theory could be useful in understanding and predicting career maturity. Through this process, Crites (1978) defined five career choice competencies within various sub skills to help determine an individual's overall level of career maturity. The competencies include accurate self-appraisal, gathering occupational information, goal selection, making plans for the future, and problem solving.

Super (1990), meanwhile, developed the first accepted instrument that measures an individual's level of career maturity. Super developed the Life-Career Rainbow, which includes three dimensions. The first dimension pertains to career maturity, while the second dimension in the rainbow is life space. The final band of the rainbow represents the major life stages of growth, exploration, establishment, maintenance, and decline. Overall, the Life-Career Rainbow is very influential to career maturity theory as it outlines the process of personal development and also serves as a guide to this process. As is evident, the concepts of career decision making self-efficacy and career maturity are significantly correlated (Finch, 2007; Finch, 2009).

While the construct of career maturity has been used extensively over the last 60 years, it has not been without criticism (Patton & Creed, 2001). Specifically, research into the demographic variables (e.g., age, gender, race) associated with career maturity has been said to be random and mixed. Throughout the literature, demographic variables have been very influential in explaining differences in an individual's level of career maturity (Kornspan & Etzel, 2001; Naidoo, Bowman, & Gerstein, 1998). In several studies, career maturity and age have been positively correlated (Healy, O'Shea, and Crook, 1985). However, research has shown that there are instances where an individual's transition points imposed by the education system have inhibited maturation (Patton & Creed, 2001). For example, Thompson and Lindeman (1981) found significant differences in career maturity scores between students in grades 9 and 10, and between grades 9 and 11, and 9 and 12. Conversely, Fouad (1988) reported that students in grade 9 did not have lower career maturity scores than students in grade 12. Then again, Bright and Earl (2003) indicate that age may play an important role in career maturity. The results of their study showed that third-year college students had higher levels of career maturity than first-year college students.

As far as gender is concerned, the research has also been inconsistent (Patton & Creed, 2001). Various studies conducted over the past 20 years have found that, in general, females in various age groups have higher levels of career maturity than men (Alvi & Khan, 1983; Herr & Enderlein, 1976; King, 1989; Lokan, 1984; Luzzo, 1985; Westbrook, 1984). In other studies, however, females scored higher in some subscales and lower on others (Fouad, 1988; Achebe, 1982). Healy, Mitchell, and Mourton (1987) showed gender differences in the career maturity attitude of college students, but others have failed to show any significant differences between genders in their studies (Luzzo, 1993; McCaffrey, Miller, & Winston, 1984).

Research concerning race and ethnicity has also been mixed. Kennedy and Dimmick (1987) were among the first researchers to investigate differences between demographic variables within groups of student-athletes in relationship to levels of career maturity. In their study, they compared a group of 122 male student-athletes to a group of 80 undergraduate non-athletes. The results showed no significant differences between races on the measure of levels of career maturity. The data also indicated that student-athletes from revenue producing sports had lower career maturity than non-athletes. Meanwhile, McNair and Brown's (1983) study comparing career maturity of Black and White female 10th graders supports the idea that ethnicity predicts different levels of career maturity. Luzzo (2000) also found that African-American students were more likely to experience barriers to their career maturity due to their race.

Several psychological factors have also been determined to influence an individual's level of career maturity. Research suggests that career locus of control helps focus on the extent to which people feel they are in control of their own career plans (Trice, Haire, & Elliot, 1989). Individuals can tap into their locus of control both internally and externally (Rotter, 1966; Luzzo & Jenkins-Smith, 1998). Internal locus of control occurs when individuals believe they have the ability to control their job choice through their own abilities or skills. External locus of control happens when individuals believe they are pushed into a chosen path by coincidence or by forces beyond their control. The argument is that individuals who possess an external locus of control will exhibit lower levels of career maturity, a higher degree of indecision, and take fewer risks than an individual with an internal locus of control (Fuqua, Blum, & Hartman, 1988; Kornspan & Etzel, 2001).

College athlete career maturity. The college years are viewed as a time where young adults participate in career exploration and new levels of self-awareness (Beauchamp & Kiewra, 2004). As a result, college is seen as an ideal time to prepare student-athletes for the real world. Nevertheless, many student-athletes are still ill prepared for the transition to a life beyond sports after their college athletic careers are completed (Chartrand & Lent, 1987). Sowa and Gressard (1983) posit that there is a gap in the development of life skills pertinent to a successful transition away from athletics, causing many student-athletes to suffer difficulties specifically in the area of career maturity.

Ewing (1975) conducted one of the first studies on student-athletes' levels of career maturity by comparing 107 student-athletes and non-athletes on measures of decision making related to academics, effects of extracurricular activities on grade point average, academic majors and career patterns, and study habits and attitudes. Ewing (1975) found that student-athletes scored lower than non-athletes on acceptance of the education role, level of work methods, and teacher approval. Student-athletes also had an external locus of control when selecting their academic major allowing friends, coaches, or other athletic administrators to influence their decisions. On the other hand, non-athletes referred to personal pursuits while making the decision. Results also showed that student-athletes were more likely to have their grade point average affected during times of high levels of extracurricular activity, particularly during the athletic season.

Sowa and Gressard (1983) expanded on this line of research by utilizing the Student Developmental Task Inventory (SDTI; Winston, Miller, & Prince, 1979) to investigate the developmental tasks of 75 randomly selected male and female student-athletes and non-athletes at a NCAA Division I institution. The purpose of their study was to compare the career

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development and educational plans of the two groups. The results of the study showed that students-athletes scored significantly lower than non-athletes on measures of educational plans, career plans, and mature relationships with other students. However, the results did not find any significant differences between male and females for scores on any developmental subscale in the SDTI. Nevertheless, male football and basketball student-athletes had lower overall mean scores than female student-athletes on all developmental tasks. Luzzo (1985), meanwhile, in his study of 401 undergraduate students, found that female college students have significantly higher levels of career maturity that male college students.

Cornelius (1995) added to these findings after investigating the athletic identity, peer and faculty socialization, and college student development of 228 college students who were not members of any college athletic team, but competed recreationally. Cornelius found that athletic identity was significantly related to the lifestyle management tasks, meaning those with greater levels of athletic identity had successfully learned to manage their time, relationships, and obligations, which are key components of career maturity.

More recently, Finch (2009) found that identities of college student-athletes were predictors of career decision-making self-efficacy. That is, the more a student-athlete identified with his or her academic identity, the more confidence they had in their ability to make career decisions.

Murphy, Petitpas, and Brewer (1996) examined the relationship between identity foreclosure, athletic identity, and career maturity levels of 124 student-athletes. Results indicated that female student-athletes had higher career maturity scores than males, while non-athletes scored significantly higher on career development measures than all student-athletes in general. Additionally, males in revenue sports (football and basketball) had significantly lower

career maturity levels than student-athletes from other sports. They also found that athletic identity and identity foreclosure were inversely related to career maturity. Murphy et al. (1996) concluded that a failure to explore alternative roles coupled with high levels of athletic identity may put student-athletes at risk for delayed career development.

Martens and Cox (2000), meanwhile, used the My Vocational Situation (MVS; Holland, Daiger, & Power, 1980) instrument to investigate athletic identity and career maturity trends of student-athletes and non-athletes at a NCAA Division I institution. Researchers found that athletes and non-athletes differ in perceived need for occupational information, and to a smaller degree vocational identity (the ability and awareness to specify personal characteristics and goals related to career development), with non-athletes having less of a perceived need for occupational information and a stronger need for vocational identity. Researchers also found that student-athletes scored significantly lower on career development measures than non-athletes. However, Martens and Cox failed to find a significant relationship between athletic identity, sport commitment, and career development.

Kornspan and Etzel (2001) examined the career development of 259 junior college student-athletes by having them complete the Career Maturity Inventory – Attitudes Scale (Crites, 1978), the Career Decisions Making Self-Efficacy Scale – Short Form (Taylor & Betz, 1983), the Athletic Identity Measurement Scale (Brewer et al., 1993), and the Career Development Locus of Control Scale (Trice, Haire, & Elliot, 1989). After conducting regression analyses, the researchers concluded that career locus of control, career self-efficacy, athletic identity, gender and race were significant predictors of student-athletes' levels of career maturity.

After conducting a qualitative study utilizing in-depth interviews of four male and four female student-athletes at a major four-year institution in the United States, Lally and Kerr

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(2005) found that the student-athletes' career planning was delayed during their freshman and sophomore years but began to progress as they moved into their junior and senior years. This supports the findings of Brown and Hartley (1998), who suggest that student-athletes can invest in both student and athlete roles simultaneously. By doing so, student-athletes are more likely to explore non-sport career options as the student-athlete gets older. This also supports Clow's (2000) findings, which show that student-athletes who were enrolled in career development courses increased their view of themselves and their school experience.

Brown and Hartley (1998) compared 114 NCAA Division I and NCAA Division II male football and basketball players by measuring levels of athletic identity and career maturity. Their findings revealed that there was no significance between level of athletic identity and any of the five subscales of the Career Development Inventory (CDI; Thompson, Lindeman, Super, Jordaan, & Myers, 1981). There also was no significant difference between athletic identity and level of competition. However, athletes who indicated a career choice preference to participate in professional sports, showed lower levels of career maturity compared to student-athletes who expressed interest in other careers. Although this study suggests that there are no differences between the two divisions, the study only pertains to student-athletes in the revenue producing sports of football and men's basketball.

Researchers have also studied the impact of race and type of sport played on career maturity (Smallman & Sowa, 1996). Smallman and Sowa used the CDI to investigate how the variables of race and type of sport impacted career maturity in 125 male student-athletes enrolled in a NCAA Division I university. Race was divided into two groups. The first group included African Americans, Asian Americans, Hispanic Americans, Native Americans, and other. The second group consisted of student-athletes identifying themselves as White. Type of sport was

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divided into revenue and non-revenue sports. Revenue sports was made up of football and men's basketball, while non-revenue sports consisted of wrestling, track, tennis, swimming, lacrosse, soccer, and baseball. Researchers reported that neither race nor type of sport indicated a significant difference in levels of career maturity. This suggests that students in non-revenue sports were not different than those in revenue producing sports. However, this seems to contradict other findings that show that student-athletes in revenue producing sports have significantly lower levels of career maturity than those in non-revenue sports.

While most of the literature on student-athlete levels of career maturity speaks specifically to student-athletes at the NCAA Division I level, there are studies that look at the impact of level of competition on career maturity. For example, Blann (1985) compared under- and upper-class male and female NCAA Division I and III student-athletes and non-athletes by utilizing the Student Development Task Inventory, Task 2 Developing Purpose (Winston, Miller, & Prince, 1979). Blann discovered that junior and senior student-athletes at the NCAA Division III level displayed higher levels of career maturity than NCAA Division I males. Freshman and sophomore student-athletes at both levels had lower career maturity scores than non-athletes. However, the scores between junior and senior student-athletes at both levels were equal to non-athletes.

Each of these studies helps shine light on the various aspects of athletic identity and career maturity of college student-athletes. However, while several of the studies found differences between gender, year in school, and athletic status, none of the studies looked at potential career maturity differences that exist specifically between female student-athletes across different competition levels. Many of the studies addressed, primarily drew their conclusions from samples drawn from NCAA Division I student-athletes. However, as research

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shows, trends related to student-athletes competing at the NCAA Division I level do not always align with student-athletes competing at other levels of college competition. In most instances, colleges that compete at different competition levels experience variances in philosophies that affect how each student-athlete at that particular level might identify with the athlete role, which could potentially affect the development of career maturity (Whipple, 2009). Therefore, more research among student-athletes participating in the different levels of competition is crucial in order to provide a better understanding of student-athlete athletic identity and its relation to career maturity.

Transitioning from College Sport

The transition from college to the real world can be a difficult stage of life for anyone. For college student-athletes, it is a time when many of them are faced with retirement from competitive athletics because chances of competing professionally are fairly slim. During this time, student-athletes are faced with many hardships. Greendorfer and Blinde (1985) found that most student-athletes who finish their eligibility, or graduate, experience a mild adjustment to life without sport. In their study of 1,100 student-athletes, about one-fourth indicated that they were "very unhappy" or "extremely unhappy" with their retirement. One-half stated they were "neutral" or had "no feeling". The remaining one-fourth indicated they were "very happy" or "extremely happy" with their retirement from sport.

Grove, Lavallee, and Gordon (1997), meanwhile, posit that athletes face a variety of financial, occupational, emotional, and/or social adjustments during their transition from sport. They contend that the coping processes employed by retiring athletes influence the overall quality of adaptation to athletic retirement. In their study, the researchers wanted to 1) provide a detailed analysis of how athletes cope with career transition, 2) examine the relationship between

sport-role identification and the quality of adjustment to retirement, and 3) assess how athletic identity is related to the coping strategies utilized during the career termination process. The participants of their study included 48 former athletes (28 females and 20 males) of Australian national and/or state teams. Participants represented the sports of basketball, cycling, diving, gymnastics, hockey, netball, rowing, shooting, squash, swimming, track and field, volleyball, and water polo. Each participant was asked to complete the AIMS, COPE inventory (Carver, Scheier, & Weintraub, 1989), and answer several questions pertaining to their adjustment to retirement from competitive sport. Athletic identity was assessed using a modified version of the AIMS in which the frame of reference for responses were changed from the original and phrased in the past tense. The COPE inventory assessed athletes' coping strategies used during retirement from sport. Finally, the quality of adaptation to retirement from sport was measured by asking athletes to gauge the level of financial, occupational, emotional, and social adjustment required by their retirement on bipolar scales. Specifically, athletes were asked to estimate the amount of time taken to adjust in each area, the extent to which they had planned for a post-athletic career before retirement, and the amount of anxiety related to their career development and decision-making after retirement.

The results of the study showed that the most frequently used coping strategies during transition from sport were acceptance, positive reinterpretation and growth, planning, active coping, mental disengagement, and seeking of social support for emotional reasons. The least, used coping strategies, however, were turning to religion, alcohol/drug use, and denial. The study also found that each of the adaptation measures positively correlated with athletic identity except for the amount of pre-retirement career planning, which was negatively correlated. Finally, the results showed that extreme AIMS groups differed significantly in the way they

coped with retirement. Grove et al. (1997) proposed that the results showed that retiring athletes use various coping strategies during career transition. In addition, the results indicated that athletes who have a strong and exclusive athletic identity up to the time of retirement, may be susceptible to career transition difficulties.

In a more recent study, Archer, Kearney, and Blackburn (2007) explored three themes related to the emotions experienced by college student-athletes after ending their college careers: athlete identity, issues of control, and feelings of loss related to change. The purpose of their article was to shed light on the topic in hopes of opening the door to further research which could lead to more assistance for college student-athletes that face retirement from sport. Keeping in line with the literature, the researchers contend that athletes put a tremendous amount of time, focus, and energy on their sport that goes far beyond the time spent on academics. The authors argue that athletics become more than just what student-athletes do; it becomes who they are, with almost every aspect of their lifestyles reflecting their athletic role. Archer et al. (2007) also raised several questions that helped examine the individual emotions experienced by student-athletes during retirement from sport. The first question asked was "What can and should higher education do to assist college athletes with dealing with perceived changes in identity?" (p. 69). Secondly, they asked, "How might athletic staff, career counselors, and other student affairs professionals more effectively address the needs of student-athletes as they struggle with the uncertainty of moving from 'athlete' to 'average citizen'?" (p. 69).

The authors also purport that the idea of locus of control comes into play when a student-athlete's eligibility expires and they no longer have a coach or counselor making decisions for them. Archer et al. (2007) found that unlike a parenting relationship, which in most cases continues throughout a child's life transitions, the coach-athlete relationship is based upon an

engineered set of circumstances that most likely ends suddenly upon completion of the sports career. Another concern of locus of control seen in literature is that sport participation while positive in reinforcing teamwork, discipline, and dedication, may encourage an external locus of control where student-athletes depend on others for decision making instead of taking ownership of their own actions or experiences.

Archer et al. (2007) also examined the final theme, feelings of loss related to change, by comparing existing literature on transition from sports to studies of change and transition in other fields. The researchers realized that both sports literature and organizational change literature show that individuals wage an internal struggle when forced to change. Therefore, they concluded that "athletes may welcome the end of the 'controlled life' experience of college athletics, while still experiencing differing levels of emotion related to the loss of their sports identities" (p. 72). Since a very high percentage of student-athletes' athletic careers will come to an end after their eligibility expires, more must be done to better prepare them for this experience.

There are often instances when student-athletes are forced into early retirement due to career ending injuries rather than sport ending with graduation or completion of eligibility. In these instances, the transitions are just as difficult to navigate. Blinde and Stratta (1992) examined the psychological effects of involuntary retirement from sport for college student-athletes. To interpret their data, they used Kubler-Ross' (1969) theory on death and dying as a framework. Based off the results, they concluded that the higher a student-athlete's level of athletic identity, the more difficult it would be for them to transition away from sport and their athletic identity. The researchers also found that student-athletes enter various stages when

dealing with retirement from sport. Depression, the fourth stage, was found to be the most prolonged stage for those student-athletes forced to retire due to injury.

In sum, the emotions experienced by transitioning away from sport will take place at some point in every athlete's career, whether the career ends after college or if they do move on to compete professionally. Although the WNBA has opened the doors of opportunities for women's basketball student-athletes, a limited number of spots on rosters still leave a high percentage of student-athletes facing that transitioning sooner than they would have desired.

Summary

The purpose of the current review was to examine the relationships between the constructs of athletic identity and career maturity primarily as it relates to college student-athletes. This review contained an overview of the theory, research, and measurement tools pertaining to athletic identity and career maturity. It is believed that the knowledge of how these variables relate to one another in relation to women's basketball student-athletes will serve as a guide for personal and career development initiatives across all levels of college athletics. Numerous researchers and authors have reported findings related to athletic identity and career maturity of the college student-athlete, and various studies have been conducted that make comparisons between student-athletes among various sports and their non-athlete peers. However, there are still gaps in the body of literature that need to be filled. While most of the focus in the literature is on NCAA Division I athletics, more research is needed that compares student-athletes participating at varying levels of competition. Subsequently, the purpose of this study is to lead to an overall better understanding of student-athlete identity formation and its relation to career maturity in order to ensure success at all levels of higher education.

Chapter 3: Method

To conduct this study, a quantitative descriptive research design was utilized. Heppner, Kivlighan, and Wampold (1999) explain that descriptive designs enable researchers to explain the occurrence of variables, the underlying dimensions in a set of variables, or the relationship between or among variables. A key advantage of this type of design is that it allows for statistical comparison and analysis of the data by measuring the responses of a large group based on a limited number of questions (Patton, 2002). While this can be very effective, it is important that validity and internal reliability be maintained through proper design construction. This ensures the instruments measure what they are intended to measure. Thus, this chapter describes the research design, participants, procedures, instrumentation, and data analyses for this study. Prior to data collection, the researcher obtained approval from the University of Arkansas Institutional Review Board for the use of human subjects. Approval was obtained for informed consent forms, instruments employed, demographic questions, and research design.

Participants and Procedures

The sample for this study was taken from female basketball student-athletes attending NCAA Division I, II, III, and NAIA institutions during the 2014-2015 academic year. The institutions chosen to participate were selected based on a convenience sampling method, starting with teams from each competition level for which the researcher had contacts on the coaching staff and that were located in the southeastern region of the United States. The researcher investigated in which conferences those women's basketball teams participated and located the conference websites for those teams. After making a list of the teams in the conferences researched, the women's basketball head coaches' contact information was then pulled from each teams' website, which included phone numbers and email addresses. The head

coaches were then contacted directly by phone and sent a general email (see Appendix 1) to request participation within the study and to also explain the study's purpose and testing procedures. Follow-up emails and phone calls were made two weeks after the initial request in order to recruit more participants. Teams who agreed to participate in the study were mailed a survey packet that included an informed consent letter (see Appendix 2), the Career Maturity Inventory – Revised Attitude Scale (CMI-R; Appendix 3), and the Athletic Identity Measurement Scale (AIMS; Appendix 4), which also included a demographic questionnaire at the bottom. Coaches were asked to have their student-athletes complete the survey during study hall or prior to practice and then collect the surveys from the student-athletes once they were done. After collecting them from the student-athletes, coaches returned them to the researcher in a self-addressed envelope that was provided in the survey packet. In order to ensure anonymity, participants were not asked to divulge their names or the names of their institution on the survey. However, student-athletes were asked to provide their competition level by making a selection on the demographic questionnaire.

The final sample pool consisted of 15 NCAA Division I schools from the Southeastern Conference and the Southland Conference, 13 NCAA Division II schools from the Great American Conference and the Mid-America Intercollegiate Athletics Association, 19 NCAA Division III schools from the American Southwest Conference, the USA South Athletic Conference, and the St. Louis Intercollegiate Athletic Conference, and 10 NAIA schools from the Sooner Athletic Conference. Of the 57 institutions contacted, 19 institutions agreed to participate and returned completed surveys: 5 of 15 NCAA Division I schools, 3 of 13 NCAA Division II schools, 5 of 19 NCAA Division III schools, and 6 of 10 NAIA schools. The total number of women's basketball student-athletes that returned surveys was 212. However, three

(1.4%) of those returned surveys were removed due to incomplete responses. Thus, the final sample size for this study was 209 women's basketball student-athletes: 62 from NCAA Division I, 40 from NCAA Division II, 50 from NCAA Division III, and 57 from the NAIA. A G*Power 3.1.9.2 post hoc power analysis was used to confirm that the sample size was sufficient in order to achieve appropriate power (i.e., 0.8) with assuming moderate effect size. The result of the analysis indicated the number of participants was adequate. The sample's ethnicity was divided into three categories: Black, White, and Other. The Other category was formed due to the small number of overall respondents that defined themselves as Hispanic, Latino, or Latin American, Asian or Pacific Islander, or Native American or Alaskan Native. The sample also included student-athletes across all academic years of participation, which included freshmen through those in their senior year or above. The sample was also grouped based on socioeconomic status and professional athletic career aspirations. A complete breakdown of the sample's demographics is seen in Table 1.

Table 1

Demographic Information of Participants

Factors	*n*	%
Competition Level		
NCAA Division I	62	29.7
NCAA Division II	40	19.1
NCAA Division III	50	23.9
NAIA	57	27.3
Race		
Black	92	44.0
White	88	42.1
Other	29	13.9
Year in school		
Freshman	60	28.7
Sophomore	41	19.6
Junior	50	23.9
Senior and above	58	27.8
Socioeconomic status		
Low income	88	42.1
Moderate income or above	121	57.9
Professional athletic career		
Will pursue	76	36.4
Will not pursue	133	63.6

Instruments

       Demographic Questionnaire. The demographic questionnaire (Appendix 4) was used to gather information about the participants' competition level, race, year in school, socioeconomic status, and professional athletic career aspirations. Socioeconomic status was determined in a few steps. First, student-athletes were asked "Do you receive money from a Federal Pell Grant?" This question was asked in order to obtain a general idea of the student-athletes' family income. Student-athletes who answered "Yes" were placed in the *low income* group and student-athletes who answered "No" were placed in the *moderate income or above* group. In order to receive money from a Federal Pell Grant, a student-athlete must meet several criteria. The Federal Pell Grant Program provides need-based grants to low-income undergraduate students. The U.S. Department of Education (2015) determines each student's financial need by using a standard formula established by Congress. The elements of the formula include the student's income, parents' income, the family's household size, and the number of family members (excluding parents) attending postsecondary institutions. In order to qualify for a Federal Pell Grant, students must submit a Free Application for Federal Student Aid (FAFSA). After filing a FAFSA, the student receives a Student Aid Report, which notifies the student if she is eligible for a Federal Pell Grant (U.S. Department of Education, 2015). In order to determine the student-athletes' professional athletic career aspirations, student-athletes were asked to respond to the question, "Do you plan to pursue a professional basketball career when you are finished with your collegiate athletic career?"

       Athletic Identity Measurement Scale (AIMS). The AIMS (Brewer et al., 1993) was utilized to measure the strength of identification with the athlete role. The instrument assesses an individual's perception of sports, affective reactions to sports-related outcomes, and exclusivity

of identification of the athletic role. The instrument contains 10 items where participants

respond on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree) to

certain statements. For example, a sample item on the AIMS asks participants to respond to how

much they agree with the statement "I consider myself an athlete". The final score consists of

the sum of the responses to the 10 items. The highest one can score on the instrument is 70 and

the lowest is 10. Higher scores on the instrument indicate higher levels of identification with the

athlete role and lower scores are associated with a lesser degree of athletic identification. Brewer

et al. (1993) reported a test-retest reliability coefficient of .89 over a two-week lapse period, and

internal consistency is reported to be high with an alpha coefficient of .93. Based on Nunnaly

(1978), an alpha coefficient of .70 or greater establishes an acceptable level of internal

consistency. Support for construct validity was also provided after student scores on the AIMS

were highly correlated with scores on the importance of sports competence scale of Fox's (1990)

Perceived Importance Profile (PIP), $r(225)=.83$, $p<.001$ (Brewer et al., 1993).

 Career Maturity Inventory-Revised Attitude Scale (CMI-R). The CMI-R (Crites and

Savickas, 1996) was used to measure the degree of confidence a person has in his or her ability

to make career related decisions (Crites, 1978). The CMI was first administered in 1961 to

students in grades 5 through 12 and was originally referred to as the Vocational Developmental

Inventory (VDI; Crites, 1961). The original CMI contained 50 true or false questions that

pertained to attitudinal statements about making a career choice. An additional Competence Test

made up of 100 multiple choice questions was later added in order to measure the more cognitive

variables of career maturity such as self-appraisal and occupational information (Crites &

Savickas, 1996). To further develop and enhance the CMI, it was revised in 1978 (Crites, 1978).

An additional revision of the CMI took place in 1996 in order to address several reported

drawbacks of the 1978 version (Savickas & Porfeli, 2011). The drawbacks included the following: 1) testing time was too long; 2) the instrument did not apply to postsecondary students or employed adults; 3) the subscales were not useful; 4) the uses for career counseling was limited; and 5) there were incomplete scoring options. To account for these limitations, Crites and Savickas (1996) revised the instrument in order to make it more applicable in counseling and career development programs. A major difference between the 1978 CMI and the 1996 CMI is a change in the response formats. In the CMI-R, the responses have been changed to Agree (A) and Disagree (D) from True (T) and False (F). Also, several items specific to school years were eliminated in the revision in order to make the instrument more applicable to postsecondary and adult populations (Crites & Savickas, 1996). This made it more applicable to both younger and older individuals.

The CMI-R consists of 25 diverse statements with an overall score ranging from 0 to 25. Each statement has a score of 1 or 0 depending on whether or not a respondent chooses *Agree* or *Disagree*. Several examples of statements that make up the CMI-R are "There is no point in deciding upon a job when the future is so uncertain" and "I really can't find any work that has much appeal to me". An individual's final score represents the individual's overall maturity of attitudes and competencies that are vital in realistic career development (Crites, 1978). A higher score indicates more highly developed attitudes toward career decisions. Scores above 20 indicate that individuals are well prepared for career planning activities and are able to use interest inventories and advanced career exploration techniques. Scores between 16-19 indicate that an individual is developing at a normal pace. Any score at 15 or below indicates that an individual is not ready to make career related decisions (Busacca & Taber, 2002). Crites and Savickas (1996) reported that because the items in the 1996 CMI-R were selected from the 1978

CMI, the CMI-R has the same reliability and validity as the items in the previous edition. The

1978 CMI had internal consistency coefficients for the Attitude Scale at .78 and Competence

Test Coefficients ranged from .63 to .86 (Crites, 1978b). Crites (1978b) also presented evidence

on content, criterion-related, and construct validity. Several other researchers found that the

CMI-R has demonstrated suitable reliability and validity measures (Busacca & Taber, 2002;

Dipeolu, 2007; Powell & Luzzo, 1998).

Data Analyses

To conduct this study, the data were transferred into the Statistical Program for Social

Sciences (SPSS) version 23 to be analyzed. A Pearson product-moment correlation was

calculated in order to determine the relationship between athletic identity and career maturity.

Five MANOVAs were conducted in order to test differences between the independent variables

of a women's basketball student-athlete's (a) *competition level*, (b) *race*, (c) *year in school*, (d)

socioeconomic status, and (e) *professional sport aspirations* on the dependent variables of

athletic identity and *career maturity*.

Chapter 4: Results

The AIMS (Brewer, et al., 1993) and the CMI-R (Crites & Savickas, 1996) were utilized

in order to determine if there is a correlation between the athletic identity and career maturity of

women's basketball student-athletes. Both the AIMS and CMI-R were also used to determine if

a statistically significant relationship exists in women's basketball student-athletes based on a)

competition level, b) *race*, c) *year in school*, d) *socioeconomic status*, e) and *professional sport*

aspirations. Surveys were sent to schools representing NCAA Division I, NCAA Division II,

NCAA Division III, and NAIA institutions. The results of the surveys that were sent back were

scored to determine the career maturity and athletic identity of women's basketball student-

athletes.

Descriptive Statistics

As shown in Table 2, the final sample size for this study was 209 women's basketball

student-athletes attending NCAA Division I, II, III, and NAIA institutions. The sample was also

divided based on race, year in school, and socioeconomic status. Student-athletes were also

divided based on their response to the question, "Do you plan to pursue a professional basketball

career when you are finished with your collegiate athletic career?" Table 2 also includes the

means and standard deviations for the AIMS and CMI-R for the individual factors investigated in

this study.

Table 2

Means and Standard Deviations for the Factors on the Dependent Variables

		AIMS			CMI-R	
Factors	*n*	*M*	*SD*		*M*	*SD*
Competition level						
NCAA Division I	62	53.68	9.80		16.53	3.14
NCAA Division II	40	48.02	7.06		18.25	2.54
NCAA Division III	50	50.82	10.09		17.50	2.80
NAIA	57	49.11	9.43		16.79	2.39
Race						
Black	92	50.82	9.35		16.64	2.65
White	88	51.07	9.21		17.59	2.97
Other	29	48.97	10.86		17.52	2.61
Year in school						
Freshman	60	52.03	8.80		16.67	3.02
Sophomore	41	49.90	10.70		17.07	2.56
Junior	50	50.28	9.20		17.48	2.61
Senior and above	58	50.12	9.62		17.47	2.90
Socioeconomic status						
Low income	88	51.39	9.91		16.72	2.95
Moderate income or above	121	50.14	9.19		17.49	2.67
Professional athletics career						
Will pursue	76	54.75	8.66		16.17	3.00
Will not pursue	133	48.33	9.18		17.73	2.54

In addition, a frequency distribution was performed in order to determine the percentage of student-athletes who planned to pursue a professional basketball career based on the different factors. A complete breakdown of the results from the frequency distribution is presented in Table 3.

Table 3

Frequencies and Percentages of Student-athletes that Plan to Pursue a Professional Sports Career Based on Different Factors

Factors	n	Professional Career Pursuit	
		Will (%)	Will not (%)
Competition level			
NCAA Division I	62	47 (75.8)	15 (25.2)
NCAA Division II	40	3 (7.5)	37 (92.5)
NCAA Division III	50	13 (26.0)	37 (74.0)
NAIA	57	13 (22.8)	44 (77.2)
Race			
Black	92	47 (51.1)	45 (48.9)
White	88	14 (15.9)	74 (84.1)
Other	29	15 (51.7)	14 (48.3)
Year in school			
Freshman	60	19 (31.7)	41 (68.3)
Sophomore	41	19 (46.3)	22 (53.7)
Junior	50	19 (38.0)	31 (62.0)
Senior and above	58	19 (32.8)	39 (67.2)
Socioeconomic status			
Low income	88	41 (46.6)	47 (53.4)
Moderate income or above	121	35 (28.9)	86 (71.1)
Total	209	76 (36.4)	133 (63.6)

Inferential Statistics

In order to assess the relationship between athletic identity and career maturity of women's basketball student-athletes and to identify variables that may affect this relationship, such as competition level, race, year in school, socioeconomic status, or professional athletic career aspirations, several hypotheses were investigated. By determining the relationship and identifying possible obstacles to success, college administrators can further develop ways to enhance the student-athlete academic and athletic experience in hopes of empowering young adults to graduate and move on to successful careers in their field of choice. Hence, there were six hypotheses investigated in this study.

Hypothesis one states that there is no statistically significant correlation between the athletic identity and career maturity of women's basketball student-athletes. To test this hypothesis, a Pearson product-moment correlation coefficient was computed to assess the relationship between women's basketball student-athletes' scores on the AIMS ($M = 50.67$, $SD = 9.49$) and CMI-R ($M = 17.16$, $SD = 2.81$). The results of the correlational analysis revealed a significant moderate negative correlation, $r(207) = -.32$, $p < .001$. In general, the result suggests that women's basketball student-athletes with higher levels of athletic identity will display lower levels of career maturity. Therefore, hypothesis one was rejected.

Hypothesis two states that there is no statistically significant difference in athletic identity or career maturity based on a student-athlete's level of college competition. Therefore, a MANOVA was conducted to determine the effect of competition level on the two dependent variables of athletic identity and career maturity. Significant differences were found among the four competition levels on the dependent measures, Wilk's $\Lambda = .91$, $F(6, 408) = 3.26$, $p = .004$, $\eta^2 = .046$, thus rejecting hypothesis two.

Analyses of variances (ANOVAs) on the dependent variables were conducted as follow-up tests to the MANOVA. Using the Bonferroni method, each ANOVA was tested at the .025 (.05/2) level to account for Type I error. The ANOVA demonstrated significant effects on the AIMS scores, $F(3, 205) = 3.78$, $p = .011$, $\eta^2 = .052$, and also on the CMI-R scores, $F(3, 205) = 3.76$, $p = .012$, $\eta^2 = .052$. This indicated that significant differences existed based on competition level for both the AIMS and the CMI-R.

Because there were four levels of competition to be compared, Tukey Post hoc analyses were conducted to find out which levels of competition were significantly different. The results revealed that significant differences exist between NCAA Division I and NCAA Division II women's basketball student-athletes on both the AIMS ($p = .016$) and the CMI-R ($p = .013$). As shown in Table 2, these results indicate that women's basketball student-athletes competing at the NCAA Division I level have significantly higher levels of athletic identity and significantly lower levels of career maturity than women's basketball student-athletes at the NCAA Division II level. There were no significant differences found when comparing student-athletes at NCAA Division III or NAIA institutions against student-athletes at other levels of competition.

For hypothesis three, a MANOVA was conducted to test if there are no statistically significant differences in athletic identity and career maturity based on a women's basketball student-athlete's year in school. No statistically significant differences were found between the four classification levels, Wilk's $\Lambda = .98$, $F(6, 408) = .69$, $p > .05$, $\eta^2 = .01$. Consequently, no follow-up procedures were required.

For hypothesis four, a MANOVA was conducted to test if there are no statistically significant differences in athletic identity and career maturity based on a women's basketball student-athlete's race. No statistically significant differences were found between the three

groups, Wilk's $\Lambda = .97$, $F(4, 410) = 1.85$, $p > .05$, $\eta^2 = .02$. Consequently, no follow-up procedures were required.

For hypothesis five, a MANOVA was conducted to test if there are no statistically significant differences in athletic identity or career maturity based on a women's basketball student-athlete's socioeconomic status. There were no statistically significant differences found between the two groups, Wilk's $\Lambda = .98$, $F(2, 206) = 1.99$, $p > .05$, $\eta^2 = .02$. Consequently, no follow-up procedures were required.

For hypothesis six, a MANOVA was conducted to determine if there are no statistically significant differences in athletic identity or career maturity between women's basketball student-athletes who plan to pursue a professional basketball career and those who do not. The results indicate that significant differences were found among the two groups on the dependent measures, Wilk's $\Lambda = .86$, $F(2, 206) = 16.18$, $p < .001$, $\eta^2 = .14$. Thus, hypothesis six was rejected.

ANOVAs were conducted as follow-up tests. Using the Bonferroni method, each ANOVA was tested at the .025 (.05/2) level to account for Type I error. The ANOVA demonstrated significant effects on the AIMS scores, $F(1, 207) = 24.63$, $p < .001$, $\eta^2 = .106$, and also on the CMI-R scores, $F(1, 207) = 15.96$, $p < .001$, $\eta^2 = .072$. As shown in Table 2, these results indicate that women's basketball student-athletes that plan to pursue a professional basketball career after graduating display significantly higher levels of athletic identity and significantly lower levels of career maturity than those that do not intend to pursue a professional basketball career.

Chapter 5: Discussion

Previous research has explored the relationships between athletic identity and career maturity of college student-athletes (Adler & Adler, 1987; Brown & Hartley, 1998; Brewer, Van Raalte, & Linder, 1993; Horton & Mack, 2000; Murphy, Petitpas, & Brewer, 1996; Robinson, 2013). However, little work has been done that specifically investigates these claims as they pertain to female student-athletes. Therefore, this investigation was initiated in order to examine the relationship between the constructs of the athletic identity and career maturity of women's basketball student-athletes. Further variables that might affect the relationship between these two constructs were also investigated; they include competition level, race, year in school, socioeconomic status, and intention to pursue a professional basketball career. The sample for this study was comprised of women's basketball student-athletes competing at various NCAA Division I, II, III, and NAIA institutions in the southeastern region of the United States. The final sample size was 209 women's basketball student-athletes.

Meaning and Interpretation of Findings

Overall, the findings in the study indicate that a there is a negative correlative relationship between athletic identity and career maturity for the total sample (i.e. stronger identification with the athletic role is associated with lower levels of career maturity). Based on the results of this research, it appears that the more a women's basketball student-athlete identifies with her role as an athlete, the lower the degree of confidence she has in her ability to make career related decisions. This finding is consistent with literature that states that student-athletes with higher levels of athletic identity will display lower levels of career maturity (Murphy et al., 1996). The overall mean scores for career maturity ($M = 17.16$) indicates that women's basketball student-athletes are developing the ability to make career related decisions at

the normal pace (Crites & Savickas, 1996). Meanwhile, the overall mean score on the athletic

identity measure ($M = 50.67$) indicates that women's basketball student-athletes have a

moderately high identification with the athlete role (Brewer et al., 1993).

Significant differences were also found between NCAA Division I and NCAA Division

II women's basketball student-athletes on the measures of athletic identity and career maturity.

Women's basketball student-athletes at NCAA Division I institutions had significantly higher

levels of athletic identity than women's basketball student-athletes at NCAA Division II

institutions. Whereas, women's basketball student-athletes at NCAA Division II institutions had

significantly higher levels of career maturity than women's basketball student-athletes at NCAA

Division I institutions. This is somewhat consistent with Sack and Thiel (1979) who purport that

NCAA Division I student-athletes experience greater role conflict than those in Division II or III.

However, when comparing NCAA Division III and NAIA institutions against other competition

levels in the current study, no significant relationships existed. Therefore, perhaps it is not the

level of competition itself that was the cause of the findings.

For example, when comparing women's basketball student-athletes who plan to pursue a

professional career against those that do not, the results also indicate that there are significant

differences between the two groups. Of the total sample size ($N = 209$), only 36.4% ($n = 76$) of

women's basketball student-athletes reported that they plan to pursue a professional basketball

career, while 63.6% ($n = 133$) stated that they do not. Therefore, a possible explanation for the

differences between NCAA Division I and NCAA Division II women's basketball student-

athletes may be explained by the underlying factor of their plans to pursue a professional

basketball career rather than mere differences in competition level. It is important to note that in

this study, only 7.5% ($n = 3$) of NCAA Division II women's basketball student-athletes

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answered that they plan to pursue a professional basketball career in comparison to 75.8% ($n =$ 47) of NCAA Division I women's basketball student-athletes.

Brown and Hartley (1998) found that student-athletes who indicated a career choice preference to participate in professional sports, showed lower levels of career maturity compared to student-athletes who expressed interest in other careers. However, Brown and Hartley (1998) only focused on investigating student-athletes in the sports of men's basketball and football. Perhaps their findings now pertain to women's basketball student-athletes as well. As the current study suggests, if women's basketball student-athletes believe competing professionally is a viable career option, it seems they will spend more time narrowing their focus on their sport and less time developing career maturity.

It is also important to note that NCAA Division I women's basketball student-athletes had the highest mean score on the measure of athletic identity ($M = 53.68$) and the lowest mean score on the measure of career maturity ($M = 16.53$) compared to all other competition levels. Therefore, it seems student-athletes at this level are at the greatest risk of being ill-prepared for life after college sports despite having more resources than those at lower levels of competition.

When analyzing the associations between race on the constructs of athletic identity and career maturity, White women's basketball student-athletes had the highest mean score on both measures of athletic identity ($M = 51.07$) and career maturity ($M = 17.59$) compared to other races. However, no significant differences were found between races. This supports Smallman and Sowa (1996) who also failed to find significant differences based on race in their study of football and men's basketball student-athletes. Since more opportunities now exist for females to pursue professional athletic careers, it seems that previous findings relating only to male student-athletes are now applicable to female student-athletes. If this is the case, perhaps

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previous research stating that males experience more role conflict than females (Sack & Thiel, 1979) needs to be reinvestigated. With the option to pursue professional athletic careers, female student-athletes are conceivably now experiencing increased levels of role conflict equal to or greater than their male counterparts.

There was also no significant relationship found between the constructs when comparing year in school. This is in contrast to Lally and Kerr (2005) who found significant differences between second year student-athletes and those in their third and fourth year. A possible explanation for the incongruent outcomes between the current study and Lally and Kerr's is method, instrumentation, and sample size. Their study was qualitative and included both male and female respondents. Their method was in-depth interviewing presumably based on a pre-determined set of interview questions, and their sample size consisted of eight people. The current study was quantitative and used existing instruments shown to be reliable, and the sample size consisted of 209 people.

Lastly, there were no statistically significant differences that emerged when comparing the constructs based on socioeconomic status. This is consistent with previous research where socioeconomic status was not found to have any significant interaction among career maturity competencies of high school students (McLaughlin, 2003). Meanwhile, Oregon (2010) also failed to find significance when comparing mean differences in athletic identity based on the socioeconomic class of student-athletes. These findings are interesting, however, because there is a perception that competing in professional sports ensures long-term financial stability (Coakley, 1994; Stanley, 2006; Wiechman & Williams, 1997). It would seem that there would be a significantly greater identification with the athletic role if there is a belief that professional athletics is seen as the road to financial security. Perhaps, the fact that less than 1% of women's

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basketball student-athletes move on to a career in major professional basketball has encouraged those females from lower socioeconomic backgrounds to seek sustainable careers outside of competing in professional athletics (NCAA, 2015a). In the current study, 46.6% ($n = 41$) of women's basketball student-athletes who were identified as low income, expressed plans to pursue a professional basketball career in comparison to 53.4% ($n = 47$) who do not.

Limitations

Although this present study can potentially educate other researchers and practitioners about athletic identity and career maturity of women's basketball student-athletes, there are several limitations that exist. The first limitation pertains to the sample used for the study. The sample was derived from NCAA Division I, II, III and NAIA institutions primarily located in the southeast region of the United States. The restriction of the sample to this region of the country could limit the external validity and reliability of the findings. Therefore, it is difficult to determine how well the findings relate to the entire women's basketball student-athlete population across the country. The sample was also selected by a convenience sampling method, and the institutions that were asked to participate, were asked without regards to institution type (e.g. private vs. public, FBS vs. FCS, small vs. large, etc.). Since there are various sizes, types, and classifications of institutions across the country, there may be other significant differences that exist based on these specific factors.

Another limitation of note is related to the response rate from NCAA Division II institutions. While significant effort was made to recruit more institutions, only three institutions agreed to participate, which led to the smallest sample size ($n = 40$) of all levels of competition. Hence, the significant differences that were found between NCAA Division I and II women's

basketball student-athletes could be attributed to NCAA Division II having the smallest number of participants.

Recommendations

It is vital that college administrators are mindful of the relationship between athletic identity and career maturity of women's basketball student-athletes. As research suggests, less than 1% of women's basketball student-athletes will compete professionally (NCAA, 2015a). However, based on the findings of the current study, 36.4% ($n = 76$) of the women's basketball student-athletes attending NCAA Division I, II, III and NAIA institutions plan to pursue a professional basketball career after graduating. The results show that these student-athletes display significantly higher levels of athletic identity and significantly lower levels of career maturity than those women's basketball student-athletes who do not plan to pursue a professional basketball career. Based on this information, individuals working with these student-athletes (e.g. coaches, counselors, professors, etc.) must find ways to intervene and assist women's basketball student-athletes with preparation for life after sports.

Prior to enrolling in college courses, it is imperative that student-athletes meet with academic counselors and begin to map out a clear plan for academic and athletic success. First year college student-athletes should be assessed to find out their major interests and then assisted with making an informed choice prior to declaring an official major instead of being placed in a major with the intent of simply sustaining eligibility. Once a student-athlete begins classes, it would also be beneficial if they were allowed to participate in a series of transition to college programs where they are evaluated for their levels of athletic identity and career maturity. Such transition programs could also include pairing incoming student-athletes with upperclassmen who can help them navigate the different obstacles they will face as a college student-athlete. If

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it is found that these incoming student-athletes aspire to pursue a professional athletic career, specific programs can be implemented to help these student-athletes improve their levels of career maturity.

However, until more research is conducted that examines different factors associated with predicting athletic identity and career maturity, it is important that all student-athletes and each level of competition attend interventions to assist with these variables. Through these programs, all student-athletes can learn about different career opportunities and have the opportunity to meet professionals in the different fields. They must also be educated on the realities of competing professionally after college. While the purpose of these interventions would not be to quash dreams of competing professionally, the intent would be to help them understand the wide scope of possibilities that exist that would still allow them to utilize the skills acquired through sports. By investing more time educating student-athletes through career development and assisting student-athletes with establishing a proper career focus including alternatives, it can help stymie the idea of an exclusive identification with the athletic role.

It would also be beneficial for student-athletes that planned to pursue a professional basketball career to be given opportunities to be evaluated by professional scouts throughout their collegiate career. The information provided by these scouts could give these student-athletes a better understanding of what it takes to compete professionally. It could also give them an opportunity to receive unbiased feedback from potential employers and truly find out if they have the skillset required to compete at the next level. By taking such steps, this could eliminate the number of student-athletes that hold on to an unrealistic dream of competing professionally and potentially help them focus on developing skills in other areas.

Student-athletes must also learn to find a balance between academics and athletics since participation in college athletics is an extremely time consuming venture no matter the level of competition. At higher levels of competition, there are more resources in place to assist student-athletes with this task. However, for lower levels of competition, student-athlete development resources may be limited. Therefore, it is imperative that all levels of competition invest in the resources to ensure their student-athletes are developing the proper life skills necessary to help them become valuable assets to their communities after graduating. This may include athletic departments hiring career counselors who know the demand of athletics and can work specifically with student-athletes during hours that are conducive to student-athlete schedules. In many instances, time constraints faced by student-athletes due to the balancing act of academics and athletics make it more difficult for them to meet during the normal 8 a.m. to 5 p.m. business day when most university career centers are open. Therefore, having access to career resources outside of the normal business hours would be beneficial for all student-athletes.

In the current landscape of college athletics where winning seems to be most important, college coaches must also understand the importance of personal development for their student-athletes and dedicate time for their student-athletes to participate in personal and career development training. For example, the high demands of time on college student-athletes, potentially eliminates opportunities for student-athletes to secure top level internships and practicums that can aid in career maturity through networking and resume building. For many institutions, specifically at higher levels of competition, participating in summer skill and conditioning workouts is becoming the standard. Therefore, the time that was previously being spent on interning is now being spent preparing for the next athletic season. This highlights the

importance of college coaches in helping to develop strategies that allow their student-athletes to acquire career opportunities that aid in their career development.

In general, the outcomes of this study indicate that women's basketball student-athletes are developing career maturity at an appropriate pace. As a result, it can be assumed that some of the career development tools are working and should be continued. However, the findings also identify a gap in service pertaining to those who plan to pursue a professional athletic career. Therefore, schools need to be cognizant of what is happening in sport and invest more time in this demographic of women's basketball student-athletes. By doing so, those who do dream of playing professionally will be ready for the possible transition away from athletics if their dream does not become a reality. No longer is it be acceptable for any student-athlete to spend a maximum of four years competing for a university yet still be unaware of the various career opportunities that are available and ignorant of the process to secure a desirable job.

Future Research

Further examination of the relationship between athletic identity and career maturity of women's basketball student-athletes is needed in order to continue understanding their roles in the development of women's basketball student-athletes. While the current findings suggest that athletic identity and career maturity of these student-athletes are related, further research must investigate other psychological variables that might provide further evidence as to why they might be related.

The role parents play in developing athletic identity and career maturity of women's basketball student-athletes must also be investigated. Doing so can reveal how much influence parents have in helping or hurting their child develop the appropriate career maturity skills necessary to transition into life after college sports.

Further research must also include a more diverse sample size that represents the entire women's basketball student-athlete population instead of student-athletes from only the southeast region of the country. Because of the diversity in institutions across the country, it would be valuable for future researchers to examine differences between certain institution types that compete at the same level (i.e. FBS, FCS, private, public, Ivy League, etc.). Another area of study for future research could address comparing the career maturity of student-athletes at schools with staff dedicated solely to career development as opposed to those that have no student development staff or schools where student-athlete development falls into the "other duties as assigned" category.

While the current study did not find any significant differences based on certain variables alone (i.e. race, year in school, and socioeconomic status), future research needs to investigate the role an interaction of these variables plays in determining the relationships between athletic identity and career maturity since many of these variables overlap. For example, it would be constructive to investigate differences between Black women's basketball student-athletes from lower income homes against Black women's basketball student-athletes from moderate to upper income homes. In addition, future research should also investigate the relationship between various the factors investigated in this study (i.e. level of competition, race, year in school, and socioeconomic status) and professional athletic career pursuits. The results presented in Table 3 serve as a foundation for such future examinations.

In addition to this, performing a qualitative study on the career maturity of women's basketball student-athletes may present even more beneficial results and provide better ideas of the obstacles faced by women's basketball student-athletes and how best to help them overcome these obstacles. As Lincoln and Guba (1985) contend, productive, exploratory analysis and

understanding of role identities and individual career development strategies can be devised through qualitative approaches.

Likewise, performing a longitudinal study that examines women's basketball student-athlete athletic identity and career maturity from freshman year through senior year could yield even more valuable outcomes by tracking the career developmental progress of the same group of individuals during their college careers and assessing changes in athletic identity and career maturity over a period of time.

Finally, it is imperative that future research also investigate other female sports where there are opportunities to compete professionally (e.g. track and field, tennis, golf, etc.). Perhaps the findings related to women's basketball student-athletes will be uncovered in those sports as well. If so, future research must identify the variables that affect the relationships between athletic identity and career maturity on the entire female student-athlete population. By doing so, it will improve our understanding of the importance of college athletics in fulfilling the overall purpose of higher education.

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Appendices

Appendix 1

UNIVERSITY OF ARKANSAS

October 28, 2014

MEMORANDUM

TO:	Simeon Hinsey Merry Moiseichik
FROM:	Ro Windwalker IRB Coordinator
RE:	New Protocol Approval
IRB Protocol #:	14-10-195
Protocol Title:	*A Comparison of Athletic Identity and Career Maturity of Female Student-Athletes at Different Levels of Competition*
Review Type:	☒ EXEMPT ☐ EXPEDITED ☐ FULL IRB
Approved Project Period:	Start Date: 10/28/2014 Expiration Date: 10/27/2015

Your protocol has been approved by the IRB. Protocols are approved for a maximum period of one year. If you wish to continue the project past the approved project period (see above), you must submit a request, using the form *Continuing Review for IRB Approved Projects*, prior to the expiration date. This form is available from the IRB Coordinator or on the Research Compliance website (https://vpred.uark.edu/units/rscp/index.php). As a courtesy, you will be sent a reminder two months in advance of that date. However, failure to receive a reminder does not negate your obligation to make the request in sufficient time for review and approval. Federal regulations prohibit retroactive approval of continuation. Failure to receive approval to continue the project prior to the expiration date will result in Termination of the protocol approval. The IRB Coordinator can give you guidance on submission times.

This protocol has been approved for 500 participants. If you wish to make *any* modifications in the approved protocol, including enrolling more than this number, you must seek approval *prior to* implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 210 Administration Building, 5-2208, or irb@uark.edu.

Appendix 2

Email to Coaches Requesting Participation

Dear Coach XXXXXXX,

I hope you are doing well. I'm an assistant coach at the University of Arkansas, and I'm completing my doctoral dissertation on an investigation of the athletic identity and career maturity of female basketball student-athletes across different levels of competition.

I wanted to ask if you all would be interested in allowing your women's basketball student-athletes to complete a 5-10 minute survey for me. The survey would be completely anonymous as names of individuals or institutions won't be attached in any way. I recently worked in our Office of Student-Athlete Success here at Arkansas before moving over to women's basketball last year as Director of Student-Athlete Development for the team. Although I'm now in a coaching role, one of my main passions is still seeing our student-athletes become successful away from their sport.

I've attached a copy of the survey so that you can take a look at what it is I'm asking them to answer. I believe the results of this study will help athletic administrators, coaches, counselors, and advisors assist women's basketball student-athletes with meeting their career goals at the conclusion of their collegiate careers.

If you are able to help me out, I'd just mail you the number of surveys that you would need and then just ask that you have the student-athletes fill them out during a study hall or even before a practice if possible and then send them back to me in a self-addressed envelope that I will provide. Also, I'd be happy to provide the results of my research when I am finished.

If you or your athletic director have any questions about my research, please don't hesitate to ask. I look forward to hearing from you. Thank you, and have a great day.

Simeon A. Hinsey

Appendix 3

Participant Request Letter

Dear Participant,

You are being invited to participate in a survey, which is intended to examine differences in athletic identity and career maturity between female basketball student-athletes at different levels of competitions, specifically, NCAA Division I, II, III, and the NAIA. The results of this study will be used to help athletic administrators, coaches, counselors, and advisors assist college student-athletes in meeting their career goals. By completing the attached questionnaire you are voluntarily agreeing to participate. Your responses will be kept confidential and are completely anonymous.

Please note that you must be eighteen (18) years of age in order to participate in this study. The questionnaire will take approximately 5-10 minutes to complete. There are no known risks or penalties for your participation in this research study. In addition, your participation and responses will not affect your grades, class standing, or status on your athletic team.

This study has been reviewed and approved by individuals at the University of Arkansas Institutional Review Board who may inspect these records. In all other respects, however, the data will be held in confidence to the extent permitted by law.

If you have any questions about the survey items or the procedure, please contact Simeon Hinsey by calling (xxx) xxx-xxxx or through email at xxxxxxxx@xxxx.xxx.

Sincerely,

Simeon Hinsey
Ed.D. Recreation and Sport Management candidate
University of Arkansas

Appendix 4

Career Maturity Inventory – Revised Attitude Scale

For each statement below, please read carefully and indicate whether you Agree or Disagree with the statement by circling either an "A" for Agree or "D" for Disagree.

		AGREE	DISAGREE
1.	Everyone seems to tell me something different; as a result I don't know what kind of work to choose.	A	D
2.	It's probably just as easy to be successful in one occupation as it is in another.	A	D
3.	I have little or no idea what working will be like.	A	D
4.	Once you choose a job, you can't choose another one.	A	D
5.	I keep wondering how I can reconcile the kind of person I am with the kind of person I want to be in my future occupation.	A	D
6.	Sometimes you have to take a job that is not your first choice.	A	D
7.	Work is dull and unpleasant.	A	D
8.	I can't understand how some people can be so certain about what they want to do.	A	D
9.	As far as choosing an occupation is concerned, something will come along sooner or later.	A	D
10.	Choosing an occupation is something you have to do on your own.	A	D
11.	As long as I remember, I've known what kind of work I want to do.	A	D
12.	There may not be any openings for the job I want most.	A	D
13.	I don't know how to go about getting into the kind of work I want to do.	A	D
14.	There is no point in deciding upon a job when the future is so uncertain.	A	D
15.	I spend a lot of time wishing I could do work I know I can never do.	A	D
16.	If someone would tell me which occupation to enter, I would feel much better.	A	D
17.	I know very little about the requirements of the job.	A	D
18.	When choosing an occupation, you should consider several different ones.	A	D
19.	There is only one occupation for each person.	A	D
20.	The best thing to do is to try out several jobs, and then choose the one you like best.	A	D
21.	You get into an occupation mostly by chance.	A	D
22.	I seldom think about the job I want to enter.	A	D
23.	You almost always have to settle for a job that's less than you had hoped for.	A	D
24.	I really can't find any work that has much appeal to me.	A	D
25.	I'd rather work than play.	A	D

Appendix 5

Athletic Identity Measurement Scale

Please circle the number that best reflects the extent to which you agree or disagree with each statement in relation to your own sports participation. Use the scale below to respond to each statement.

1 = Strongly Disagree (SD), 2 = Moderately Disagree (MD), 3 = Disagree (D), 4 = Unsure (U), 5 = Agree (A), 6 = Moderately Agree (MA), 7 = Strongly Agree (SA)

		SD	MD	D	U	A	MA	SA
1.	I consider myself an athlete.	1	2	3	4	5	6	7
2.	I have many goals related to sport.	1	2	3	4	5	6	7
3.	Most of my friends are athletes.	1	2	3	4	5	6	7
4.	Sport is the most important part of my life.	1	2	3	4	5	6	7
5.	I spend more time thinking about sport than anything else.	1	2	3	4	5	6	7
6.	I need to participate in sport to feel good about myself.	1	2	3	4	5	6	7
7.	Other people see me mainly as an athlete.	1	2	3	4	5	6	7
8.	I feel bad about myself when I do poorly in sport.	1	2	3	4	5	6	7
9.	Sport is the only important thing in my life.	1	2	3	4	5	6	7
10.	I would be very depressed if I were injured and could not compete in sport.	1	2	3	4	5	6	7

Demographic Information

Please provide answers to __ALL__ six demographic questions.

1. What is your level of competition?
____NCAA Division I   ____NCAA Division II   ____NCAA Division III   ____NAIA

2. What is your year in school?

____Freshman ____Sophomore ____Junior ____Senior ____5th year senior or Graduate

3. What is your race?

___African-American/ Black (not of Hispanic origin)

___White, not of Hispanic origin

___Hispanic/Latino/Latin American

___Asian/Pacific Islander

___Native American Indian/Alaskan Native

___Multiracial (please specify: _____)

___Not listed above (please specify: _____)

4. Do you receive money from a Federal Pell Grant?

_____Yes   _____No

5. Do you plan to pursue a professional basketball career when you are finished with your collegiate athletic career?

_____Yes   _____No

6. What are your plans after you graduate?
_____

_____