CAREER PREPARATION: A COMPARISON OF UNIVERSITY

ATHLETES TO NON-ATHLETES

by

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DEDICATION

   This Dissertation was written for every student athlete past, present, and future. Thinking about a career after sports should not happen during your senior year but should be constantly throughout college. Think about your future, use your resources, ask questions, explore your options, invest in your time and most importantly set career goals just like we do as athletes, when we are playing our respective sports.

   Lastly, this Dissertation is also for the most important person in my life, My Dad. I am grateful to him for always telling me to go for what I want and have a purpose. I want to thank him for staying calm, listening to me even when I was panicking, standing beside me and always telling me what I needed to hear. With your support, consistency, patience, and optimism I have been able to accomplish the biggest goal of my life. Nothing is more influential for a woman than to have her Dad devoted to her life journeys. There is no bond quite like a Daddy daughter relationship.

   Thank you for your unconditional love. I hope this makes you proud "Daddy Page"!!!

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"Remember, I commanded you to be strong and brave. Don't be afraid, because the Lord your God will be with you wherever you go." ~ Joshua 1:9 (ERV)

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ABSTRACT

Athletes, who are used to being rewarded for their athletic ability, must find a way to develop career maturity following the conclusion of their involvement in collegiate sports. Less than 2% of student athletes continue to play sports professionally, which leaves 98% of student athletes to create a different professional path (Cheney-Rice, 2014). Due to these statistics, it is important that student athletes are able to transfer skills learned as an athlete into those needed to obtain a career outside of sports in order to improve the prospects for student athletes to enjoy successful careers outside of sports. The three goals of this study were to determine: (a) if career exploration, personality type, and career decision-making self-efficacy, either individually or in combination, contribute to the prediction of career maturity levels among athletes and non-athletes; (b) if gender, race and/or academic classification of freshmen and seniors contribute to the prediction of career maturity; and, (c) if socioeconomic status (SES) has a mediating impact on career maturity. A path analysis model was used to identify significant relationships between variables. The sampled population was a total of 502 college students from the same Division I Central Texas University. The main findings of this study were: a) the statistical impact that career decision-making self-efficacy has on athletes' career maturity, b) the statistical impact of different variables on the career maturity of Freshman as opposed to Seniors, c) how and when SES mediates career maturity, and d) personality being more of a predictor for female athletes and Black students compared to male athletes and White students for career maturity respectively.

I. INTRODUCTION

College sports serve not only as sources of entertainment on campus, but play a vital role in higher education by promoting student unity through participation and support of team activities (Hyman & Jura, 2009; Schroeder, 2010). In addition, sporting events in college are important because they generate large amounts of money from TV network commercials and increase awareness of universities for future students. For example, every Saturday from September through December, the major networks such as ABC, NBC, CBS, ESPN, and a few others dominate TV programming with collegiate games. During those games, thousands of fans fill stadiums to cheer on their teams, others tailgate outside of the stadium, and everyone spends lots of money at the concession stands and team retail outlets. The attention generated by sports, the revenues generated by sports, and the demands that impact sports are behind the intricate role played by sports in higher education. A complex co-dependency between athletics and higher education contributes to their mutual success. For example, universities gain both money and popularity through the success of their athletic program. An athletic program, in turn, needs the support of its university to inform fans about sporting events so they can engage in activities that support the program. This study investigates the intricacies that weave all of these elements together to play their individual and corporate roles in college athletics and higher education by analyzing the successes and challenges that confront both student athletes and non-student-athletes in college. Understanding the experiences and development of all college students can help impact the trajectory of each student after college in a positive way.

For decades student athletes have been torn between prioritizing the demands of their academic and athletic responsibilities (Wilson & Pritchard, 2005). The amount of time a student athlete spends working out, studying, and practicing for their sport is more than their non-athlete counterpart spends studying (Fisher, 2009; Gayles & Hu, 2009). Athletes are also mandated by the National College Athletic Association (NCAA) to maintain a certain GPA in order to be eligible to continue to represent their institution athletically (McPherson, 2013). Unfortunately, the demands of in-season and off-season obligations often affect student athletes' abilities to develop the skills necessary to achieve professional success in areas other than athletics. Student athletes are generally seen as individuals who are confident leaders, and to some, even invincible (Despres, Brady & McGowan, 2008; Horton, 2011). Although that might be true, not all of the characteristics derived from participating in sports successfully transfer outside of sports. Many athletes have been participating in sports since they were adolescents. They are accustomed to an environment where the ability to push harder to accomplish physical goals is highly valued. However, after their collegiate sports careers end it is important for athletes to have the confidence and ability to seek success through an alternative set of skills, such as cognitive skills, that have hopefully been developed during their college experience.

The National Collegiate Athletic Association

There are many variables can be associated with the business of the NCAA and the structure of how the governing body operates (Polite, Waller, Trendafilova, & Spearman, 2011). By NCAA rule, student-athletes must be actual students, while the institution maintains control (Buer, 2009). What does this mean? The NCAA makes the

rules on how many hours a week student-athletes can practice, particular behaviors that student-athletes are not allowed to participate in, specific activities scholarships can pay for the educational standards programs must adhere to, and serves as the catalyst for many other facets of operations (Murty, Roebuck, & McCamey, 2014; Nite, 2012; Osborne, 2014).

All student-athletes must comply with all NCAA rules, otherwise sanctions to a particular player, coach, or university can be rendered. Due to the influence of the NCAA, student-athletes are in a situation where they have to have a certain percentage of their education completed in order to remain eligible to participate in sports. The 40-60-80 rule indicates that by your sophomore year 40% of your major requirements has to be complete, 60% has to be completed by your junior year, and 80% by your senior year in order to remain eligible to participate in sports (Dryer, 2008). Unlike their counterparts, student athletes have a certain timeframe to progress through college in order to remain eligible to play their respective sport. Another implementation by the NCAA is the Academic Progress Rate (APR) that serves as an accountability instrument for student-athletes academic performance (Comeaux, Snyder, Speer & Taustine, 2004).

Under the APR, athletes earn a maximum of two points, one for maintaining academic eligibility and another for staying in school (NCAA, 2011a). This score is calculated to make sure universities and their athletic departments are holding themselves and their student accountable to stay eligible and stay in school. The consequences for insufficient APR points are loss of scholarships, reduction in practice time, or anything else the NCAA feels is tough enough to get the student-athletes and universities on track (Comeaux, Snyder, Speer & Taustine, 2004).

Being a College Student Athlete

Historically, articles and books have been written about how athletes benefit from playing sports. Some researchers suggest social interaction helps self-confidence (Pearson & Petitpas, 1990; Watt & Moore, 2001) and that student athletes are able to develop positive identity, leadership skills and strong character (Aries, McCarthy, Salovey, & Banaji, 2004). Despres et al. (2008) talk about social challenges that are often associated with an athletic identity. Creating an athletic identity is a normal occurrence considering the involvement that athletes have with their sport (Brewer, Van Raalte, & Linder, 1993). However, once this identity is formed many athletes have difficulty forming a new identity outside of their athletic one. This has created problems for athletes, making it difficult to successfully transition from being an athlete and adapting to no longer being one. There have been various college athletes who have gotten in legal trouble or have felt confused about the next phase of their life after their college careers have ended. Some of that might be influence by the fact that they are no longer able to identify with, or be around, a group they have been accustomed to for years. Research has demonstrated the problems many athletes face when their sports involvement comes to an end and they have to transition into a different role (Samuel & Tenenbaum, 2011; Wylleman & Lavallee, 2004). The issue of transition has slowly made its way into the literature and there have been various approaches to solving this matter. Special counseling for student athletes is the most common way experts feel this issue can be addressed (Despres et al., 2008; Lanning, 1982; Watt & Moore, 2001). Each of these articles reports the most successful means of helping athletes make this transition has

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resulted when counselors have been provided who have specific information about common challenges athletes face in making this difficult transition.

There has been substantial research on student athletes, their experiences, struggles, successes, perceptions, and the culture of athletic programs from a qualitative perspective (Killeya-Jones, 2005; Miller & Kerr, 2003; Schroeder, 2010). However, there is a void in quantitative research that details the career maturity of student athletes in comparison to their non-athlete counterparts. Career maturity is defined as the readiness of an individual to make informed, age-appropriate career decisions, and cope with career development (Savickas & Porfeli, 2011). Athletes, who are used to being rewarded for their athletic ability, must find a way to develop career maturity following the conclusion of their involvement in sports. There is a further gap in the literature taking the comparison of these two groups a step further by considering the influence that gender, race and academic status may exert on the variances. Less than 2% of student athletes continue to play sports professionally which leaves 98% of student athletes to create a different professional path (Cheney-Rice, 2014). Due to these statistics, it is important than student athletes are able to transfer skills learned as an athlete into those needed to obtain a career outside of sports is important to improve the prospects for student athletes to enjoy successful careers outside of sports.

Statement of the Problem

College students as a whole face distinctive challenges figuring out who they are and where they fit within society. Balancing an academic and athletic life can become an obstacle for maturing student athletes, especially as they simultaneously begin to embrace adulthood. Student athletes not only have to take on all of those challenges, but they also

have to learn how to reach their athletic potential (Wilson & Pritchard, 2005). Given the demands resulting from the different roles college athletes and non-athletes undertake, it is important to make sure they are prepared for their lives beyond college (Despres et al., 2008; Shurts & Shoffner, 2004; Stambulova, Alfermann, Statler, & Cote, 2009). For athletes, the process of returning to a different social structure—outside of athletics—can be a challenge, depending on the readiness of the athlete to accept the end of their athletic career.

Various studies have suggested that student athletes have been rated lower on career maturity than their non-athlete counterparts (Blann, 1985; McPherson, 2013). Other past research on college athletics focused on the sudden loss of athletic identity resulting from injuries or forced early retirement, and the effects of leaving a known, protective environment (Pearson & Petitpas, 1990; Wooten, 1994). Current literature has expanded its focus to include life after sports (Harrison & Lawrence, 2003), developmental transitions for athletes (Wylleman & Lavallee, 2004), transferable skills after athletics (McKnight et al., 2009), contextual factors in career development (Stambulova et al., 2009), changing roles after athletics (Samuel & Tenenbaum, 2011), and the different types of transitions that can happen to athletes physically and emotionally (Falls & Wilson, 2012). However, there is little literature exploring the problem of career maturity and variables that can impact career development. It is inevitable that college sports' careers will end, and student athletes will graduate, just as non-athletes, and leave college to move on to the next stage of their lives. As the roles for each group begin to change it is important to understand whether or not student athletes are adequately prepared for career opportunities outside of sports.

Purpose of the Study

The overall purpose of this study is to identify factors that can impact students' preparedness for life after college. Providing an opportunity to initiate change, or starting a dialogue to help universities better prepare students to excel on both personal and professional levels would be a valuable accomplishment. One of the reasons students attend college is to gain knowledge and experience in hopes of advancing their position in life. This study can build the beginning of a foundation to help students achieve that goal by understanding how these students interpret their environments. The three goals of this study were to determine: (a) if career exploration, personality type, and career decision self-efficacy, either individually or in combination, contribute to the prediction of career maturity levels among athletes and non-athletes; (b) if gender, race and/or academic classification of freshmen and seniors contribute to the prediction of career maturity; and, (c) if socioeconomic status has a mediating impact on career maturity.

Specific Research Questions

1. To what degree is career exploration a reliable predictor of career maturity?

2. To what degree is personality type a reliable predictor of career maturity?

3. To what degree is career decision self-efficacy a reliable predictor of career maturity?

4. To what degree do career exploration, personality type, and career decision self-efficacy collectively predict career maturity when included in a single prediction model?

5. In what way, if any, does socioeconomic status mediate the relationship between career exploration and career maturity?

6. In what way, if any, does socioeconomic status mediate the relationship between personality type and career maturity?

7. In what way, if any, does socioeconomic status mediate the relationship between career decision self-efficacy and career maturity?

8. What is the statistical difference, if any, between the athletes and non-athletes on research questions 1-7?

9. What is the statistical difference, if any, of gender across athletes on research questions 1-7?

10. What is the statistical difference, if any, of academic classification between freshmen and seniors on researcher questions 1-7?

11. What is the statistical difference, if any, of race on researcher questions 1-7?

Research Hypotheses

1. It is hypothesized that career exploration will be a reliable predictor of career maturity.

2. It is hypothesized that personality will be a reliable predictor of career maturity.

3. It is hypothesized that career decision self-efficacy will be a reliable predictor of career maturity.

4. It is hypothesized that career exploration, personality type and career decision self-efficacy collectively will be a predictor of career maturity.

5. It is hypothesized that socioeconomic status will mediate the relationship between career exploration and career maturity.

6. It is hypothesized that socioeconomic status will mediate the relationship between personality type and career maturity.

7. It is hypothesized that socioeconomic status will mediate the relationship between career decision self-efficacy and career maturity.

8. It is hypothesized that there will be a statistical difference between athletes and non-athletes for questions 1-7.

9. It is hypothesized that there will be a statistical difference in gender between athletes for questions 1-7.

10. It is hypothesized that there will be a statistical difference in academic classification groups between freshmen and seniors for questions 1-7.

11. It is hypothesized that there will be a statistical difference in race groups for questions 1-7.

Significance of the Study

Researchers fear that student-athletes place a greater priority on their sport than their education (Despres et al., 2008; Gayles, 2009; Horton, 2011; Wylleman & Lavallee, 2004). The emphasis on sports results from the compromise that athletes make between time preparing for a game and time they will spend preparing for academic assignments. Others argue that student athletes are marginalized (Horton, 2011; Paule & Gilson, 2010; Watt & Moore, 2001) and struggle with overall student engagement compared to their non-athlete peers (Gayles, 2009). Coaches and peers potentially emphasize winning at all costs, which can lead to stereotyping resulting from a higher degree of aggressiveness (Watt & Moore, 2001) displayed by athletes (Despres et al., 2008; Horton 2011; Paule & Gilson, 2010; Watt & Moore, 2001). Given such a confluence of conflicting demands placed on student athletes, this study aims to improve our understanding of how these forces combine to affect the career maturity of student athletes.

Student athletes should prepare themselves for life after sports because this is an inevitable transition. Based on all of the other responsibilities that student athletes have within their sport it is important not to let their time constraints keep them from exploring career options. The significance of this research is to highlight areas where student athletes and non-athletes are impacted the most when it comes to career maturity and the variables used. This will help to determine ways to develop their career maturity. Practically, this research will provide developmental awareness that can better inform the university about specific areas where student athletes feel confident, and other areas where student athletes need some confidence building. Theoretically, student athletes and non-athletes can establish a successful path for building career maturity techniques. However, there is a gap in the literature on how personality traits, self-efficacy, socioeconomic status, and academic classification can help or hinder college athletes. Including non-athletes as a comparison group is a way to gauge their counterparts who are at the same stage of their college experience. The NCAA can also benefit from information on how athletes feel about their overall career maturity. Additionally, universities can have a better understanding about characteristics that can impact their students' overall career maturity.

Operational Definitions

Academic Classification - The grade college students are currently in.

Athletic Identity - The degree to which an individual identifies with the athletic role (Brewer et al., 1993). This is operationally defined as the total score on the Athletic Identity Measurement Scale.

Big Five Inventory (BFI - 29) - Provides a concise measure of the five basic personality factors which are agreeableness, conscientiousness, extraversion, neuroticism and openness. (John & Srivastava, 1999).

Career - Area or profession an individual chooses to train and prepare for in anticipation of permanent employment.

Career Decision Making Self-Efficacy Scale - Extent to which career-related decisions are made based on environmental and personal factors, moderated by the individual's level of self-awareness and self-efficacy (Betz, Klein, & Taylor, 1996).

Career Development - Process of growth through various life stages that an individual goes through in order to select an occupation that is in concert with a person's self-concept.

Career Exploration - Exploring and learning about different careers.

Career Maturity - Readiness of an individual to make informed, age-appropriate career decisions and cope with career development (Savickas & Porfeli, 2011). In this study, career maturity was assessed by the Career Maturity Inventory-Attitude Scale (CMI-AS)

Endogenous - Dependent variable

Exogenous - Independent variable

Freshman - Individual who is in their first year of athletic eligibility (student-athletes) or has junior class standing, or has earned 1-29 credit hours for non-athletes.

Junior - Individual who is in their third year of athletic eligibility (student-athletes) or has junior class standing, or has earned 60-89 credit hours for non-athletes.

Mediator - Variable that is in place to explain the relationship between the endogenous and exogenous variables

Non Athlete/College student - An individual who does not currently participate, or has never participated in an organized, NCAA and selected Division I University-sponsored sport.

Path Analysis Model - Visual representation of a model

Path Coefficients - The direct casual effects that are represented by the p coefficient (Mertler & Vannatta, 2005).

Senior - Individual who is in their final year of athletic eligibility (student-athletes) or has senior class standing, or has earned more than 89 credit hours for non-athletes.

Socio Economic Status - An economic and sociological combined total measure of a person's work experience and of an individual's or family's economic and social position in relation to others, based on income, education, and occupation (Walpole, 2003).

Sophomore − Individual who is in their second year of athletic eligibility (student-athletes) or has junior class standing, or has earned 30-59 credit hours for non-athletes.

Student Athlete - A current undergraduate who is participating in an organized, NCAA, Division I university-sponsored sport.

Theoretical Framework

The epistemological framework for this study is critical realism. The English philosopher Roy Bhaskar, who is considered its founding father, developed this approach in the 1970s (Alversson & Skoldberg, 2009, p. 39-40). Critical realism acknowledges social phenomena are intrinsically meaningful. Hence, meaning is both externally descriptive, constitutive, and often contains material constituents as well (Easton, 2010). A large component of understanding the functionality of critical realism resides in understanding the social world and the actions that create knowledge. For a realist

researcher, objects of research, such as culture, exist and act quite independently from the observer (Gray, 2013, p. 25). In other words, knowledge progresses by taking what is already known by the individual and extending it in new events. Since critical realism is subject to the way we perceive the world, identifying one complete truth is challenging. Critical realism seeks to identify those deeper, underlying mechanisms to generate empirical phenomena (Alversson & Skoldberg, 2009, p. 40). Participants provide their personal experiences based on how they see their situation.

In understanding the social world and structure that is grounded in this theory, a college campus is an environment that represents critical realism and provides an appropriate foundation for the research. In critical realism, something is considered real if the causal effect impacts behavior and makes a difference (Alvesson & Skoldberg, 2009, p. 41). Situated in a historical, political, and social structure, critical realism allows the individual to create his or her own knowledge based on experience. The *real*-science mechanisms, *actual*- events that happen and *empirical*- experience are the three ways that knowledge can be formed (Collier, 1994, p. 44). Another way to understand critical realism is to consider the illusion of seeing water on the road in the distance, on a hot summer day. The *real* or *scientific explanation* is a mirage, which produces a reflection on the road; *actually* there is no water on the road, and *empirically* there seems to be water on the road. Using this model, the student athletes and non-athletes each have *actual* and *empirical* information and the questionnaires provided the *real* context. This allowed the knowledge that is already presented by each individual to serve as a foundation. The research continued to build on the knowledge that is already formed by combining the social and theoretical environments of each participant.

Critical realism is the preferred epistemology based on its ability to look at impacts which were identified with path analysis. Culture and society are both dynamic influences on college campuses and both played a role on this research. Student athletes and non-athletes go through different experiences in college, so it is important to gather information on both groups in order to better understand these experiences.

Overview of Remaining Chapters

This chapter provided an introduction to the importance of career maturity and included a statement of the problem, purpose of the study, research questions, hypotheses, significance, operational definitions, theoretical framework, limitations, and delimitation for the research. In addition, Chapter I provided history about college athletics and the attention that has been given to this area of research. Chapter II, presents a literature review that captures how athletes form their identities, how these identities can impact their future, and how non-athlete students compare to their athlete counterparts. Each instrument that was used for this research is also discussed in this chapter. Chapter III details the proposed methodology, as well as the analytic method, study design and theoretical basis, variables in the study, instruments, path analysis model development, path analysis symbol identification, population, sample, data collection, and key terminology. Chapter IV is a detailed examination of the results, and Chapter V concludes with an overview of the entire study along with implication for further research and practice.

II. LITERATURE REVIEW

There are many stages in life that may influence how individuals perceive themselves and where they feel they fit in the world. Although these perceptions might come during different situations and times for everyone, this is a normal part of personal development. For college student athletes, being a part of an athletic program can be life changing. Samuel and Tenenbaum (2011) explain certain athletes may experience multiple changes throughout their careers while other athletes may experience only a few. Adapting to these changes can be the difference between a positive or negative experience. Most people attend college in hopes of learning new things and figuring out what they want to do with the rest of their lives. When someone enters college as a student athlete, there is an added reason for attending college, the opportunity of being a student athlete. College student athletes are college students who are also involved in their respective organized college sport. Not only are they responsible for maintaining their academic standing, but they are also responsible for staying in shape physically and performing well in their sport. College athletes on average spend 20 hours a week practicing, working out, and studying for their sport (Gayles, 2009; Watt & Moore, 2001). This decreases the amount of time college athletes have to socialize with friends, enjoy activities outside of school, and just be a student. Time is not the only sacrifice athletes have to make; physically their bodies are sacrificed through practicing, playing actual games, and working out. Athletic programs usually structure an athlete's schedule and allocate times for training, practice, study meetings, recreation, and nearly everything else (Lanning, 1982). Due to this structure, athletes live in a world that differs from their non-athlete counterparts.

"Athletics is embedded in our national culture and has become institutionalized at universities and colleges, which is a powerful combination" (Fisher, 2009, p. 51). Within the structure of this complex and powerful relationship, it is important to know these athletes as a whole, and who they are in these athletic programs. Reviewing the literature provides a foundation to understand the different ways and reasons athletes struggle to balance the demands of being both an athlete and a student. There are different topics in the literature that scholars have highlighted in regard to athletes and the diverse situations they face. Since the literature in some topics is broadly spread out, portions of this literature review is done in chronological order while others are reviewed collectively.

Athletic Culture

The expectations, perceptions, and habits that develop over time are a large contributor to athletic culture. In order to understand the kind of support that student athletes might need, this information is important for anyone who will come into contact with former, current, or future athletes. These articles also put into perspective the environment athletes are accustomed to and help to better understand the world they experience.

In an interesting outlook on the organizational culture in college athletics, David Scott (1997) likens athletics to a functioning organization. He notes that athletic programs involve winning games, bringing attention, sponsorships, support, and encouragement for everyone to get on board to help bring in revenue. Each of these responsibilities is difficult to complete and can result in turnover in coaching positions. This is an important piece of the athletic culture because coaches are the people athletes know best and feel most comfortable around. Oftentimes, athletes base their decisions

about the college they attend on the coaching staff. Maintaining solid athletic programs and providing stability in a rapidly changing environment is imperative (Scott, 1997). Coaches are an important part of athletic environments. They not only function as the public face of the programs, they also keep up the day-to-day progress, and are responsible for the student athletes. Just as coaches are an important piece of the puzzle, athletic directors are important as well. While they are not typically seen by many people, they are the ones making major decisions about the athletic program. Ultimately, they make the hiring decisions for coaches, and in so doing, they select individuals whom they believe will cultivate the culture they want for their program. This aspect of college athletics generally goes unspoken, but is a major factor in determining the culture of each individual program. Knowledge of culture management may provide athletic directors and even head coaches with new or improved tools for increasing the success of the organizations they manage (Scott, 1997).

Watt and Moore (2001) explored the question of *who are athletes*? Their study suggests that where college athletics started and how athletics has transformed through the years is an important aspect to consider in evaluating what athletics are like today. Chronologically speaking, they begin with a discussion of the notion of athletics being introduced into colleges and universities, and end with a discussion of the impact on society, including the money and attention that are now bestowed on athletics. The NCAA has contributed to not only improve graduation rates for student athletes, but it has also impacted athletic programs across the nation in many ways. Both positive and negative experiences among students—whether the result of scheduling, isolation from other students, or sustaining a sense of identity—have all been areas where Watt and

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Moore have expanded on their research. They wrote about the modern day athlete, and how interest in, and growth of, college sports has changed over time. Recommendations to create the best experience possible for the athletes and programs were also reported. This article concluded with the impact sports have on society, and how it will continue to grow. According to these authors, issues that will continue to develop need to be addressed and scaled.

Despres et al. (2008) focused on the culture of college student athletes. They defined athletic culture as "that phenomenological environment in which college students, who are athletes, live and move when they are fulfilling their roles and responsibilities" (Despres et al., 2008, p. 200). Focusing more attention on being an athlete versus a non-athlete is a part of the culture that goes with being labeled as a student athlete. Because athletes generally receive more recognition for their athletic achievements, this impacts how athletes and others begin to perceive athletics. The social dynamics of the sports world encourage some athletes to bond together in ways that promote and even normalize over conforming deviance (Despres et al., 2008). These dynamics are what make the athletes feel comfortable in their environment, and in turn, promote teamwork. This personal development is not always positive because it can create a sense of entitlement if the people around athletes do not provide them with the tools to help them remain humble. Accountability is what Despres et al. focus on as being a key characteristic to maintaining this positive culture (2008). The demands on these student athletes can be a positive or negative depending on the support and time that athletes invest to be positive.

According to Fisher (2009), a different approach to understanding what athletic culture means can be introduced as a way to implement both athletic success and institutional rankings. This article focuses on the influence that athletics have on the institution's enrollment success, and the attention that is generated by athletics. Based on the growth in athletics through television, marketing, and social media, institutional awareness is enhanced, and opportunities for individuals to consider attending specific institutions are created that would not have existed otherwise. Sports provide an opportunity for a national audience to see who the student athletes are, and allow for a greater perception to be gained regarding athletic programs (Fisher, 2009). As a result, athletes must know how to conduct themselves in order to support this positive outlook. The interviews athletes give, the things they post on social media, and the successes they have both on and off the field, are all reflective of the institution's athletic culture. When the university can benefit from an athletic program, it produces increased pressure on everyone associated with the program, from athletes to coaches, and administrative staff. Perhaps this is a different way to view what athletic culture means; however, it is still a valuable element in understanding the social responsibility of sports and what it means for the operational process of the world.

Lastly, Gayles (2009) touched on athletes' experiences. This research is the most up to date, providing current information on what student athletes experience both on campus and in the NCAA. The NCAA has a research and education office that provides educational and leadership opportunities for student athletes (Gayles, 2009). They are responsible for tracking and improving graduation rates, understanding progress in college, and social and grouping processes, among other things. With the NCAA

conducting and reporting the results of these types of tests, athletic programs have an accountability standard for their athletes. This is where the academic side of athletics becomes an important part of the culture. If athletes do not make high enough grades, they become ineligible to participate in their sport. Student athletes on most college campuses today represent a special population of students with unique challenges and needs which differ from their nonathletic peers (Gayles, 2009).

It is not a secret that student athletes go through a different experience in college compared to non-athletes and this literature is a direct reflection of that fact. Being an athlete can present a variety of obstacles, but if the right support systems are in place within the program, everyone should be able to have positive outcomes. The culture of an athletic program is foundational to helping student athletes understand how they fit into the bigger picture. Without a consistent culture and leaders who promote the right attitudes, athletic culture can have a negative impact for the athletes who are involved.

Athletic Identity

An essential part of being an athlete is being able to identify as one. The reason this is so important is because it provides an identity for these college students who are trying to figure out where they fit in in their college settings. Athletic identity can be defined as the degree to which an individual defines herself or himself in terms of their athletic role and their environment (Lavallee, Gordon, & Grove, 1997). The concept of athletic identity was introduced by Brewer et al. in 1993. Their research measured athletic identity and identified positive and negative factors associated with a strong athletic identity. This was the first time athletic identity was given a name, and researchers were able to measure the degree to which someone did or did not have this

identity. Based on this new measurement, Martin, Eklund, & Mushett (1997) conducted a study that focused on the potential importance of social and behavioral ramifications regarding athletic identity. As such, they discovered the impact of athletic identity centered on how relationships with other athletes were affected; and, how there could also be psychological issues and concerns as well.

In 2000, Brown, Glastetter-Fender, & Shelton studied wanted to know how athletic identity impacted career control on college student athletes. It was their belief that athletic identity could be relevant in understanding the career decision-making process of college athletes. However, their findings showed that for only one half of student athletes there was a positive correlations between strong athletic identity and lower levels of career decision making processes. Mael and Asforth (2001) focused on athletic identity as a way for individuals to understand their purpose and benefits, as well as risks associated with identifying in this particular way. The main issue for individuals with a strong athletic identity was over-identifying and the resulting pressure that can produce for an individual. Each of these articles was written over 10 years ago when the athletic identity model for measurement originally surfaced. Over time, the research became more in-depth and even added a few elements to the measurement during the process.

Nasco and Webb (2006) suggested that public and private dimensions should be applied to the measurement of athletic identity. Their idea was to understand differences between what could publically be seen and what was privately known by the athlete. An example of this would be a recreational athlete versus a collegiate athlete. Both might internally perceive themselves as having an athletic identity, but publically the identity

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could be constructed differently. As a result, a new scale was introduced that refined the way athletic identity was measured. The Public-Private Athletic Identity Scale (PPAIS) was created to explore the public nature of this form of identity (Nasco & Webb, 2006). This measurement tool proved to be valid and reliable in measuring outcomes for current student athletes.

Chen, Snyder, and Magner (2010) researched the effects of athletic identity on student athletes and non-athletic students. They wanted to understand how college athletes viewed different aspect of being a student versus how non-athletes viewed being a student. According to the study, gender and the amount of time spent in college made a difference in determining the effects of athletic identity. Moreover, the influence in athletic identity perception due to sports shed new light on the benefits of sports involvement (Chen et al., 2010).

With athletic identities, the relationship between behaviors and identities becomes circular. In order to identify as an athlete, an individual must exhibit have the behavior that reflects one. This could include attending practices, playing in games, working out, or anything perceived by individuals as being for their sport. Athletes develop identities through a natural process of interacting with their environment, constructing, interpreting, and negotiating the meanings of their social interactions (Miller, 2009). The construction that takes place for these athletes is what makes up their athletic identity. Athletic identity is continuously being used for research purposes, and it is vital to use this identification process as a baseline as a way to continue to research athletes.

Role Conflict

Student athletes are in a unique situation because they have to balance being an athlete while still maintaining their grades. Settles, Sellers and Damas, Jr (2002) define role conflict as an occurrence that happens when an individual feels one role is his/her number one priority while another role is interfering with that priority. There are many perspectives on the amount of time athletes should spend on their sport versus their school work (Fisher, 2009, Gayles & Hu, 2009; Wilson & Pritchard, 2005), but the fact remains that this is a decision that students who are not athletes do not have to make. Different universities have various expectations of their athletes. Some require them to live in certain places, attend study hall, and show up at certain gatherings or even avoid particular events. Regardless of the situation, these athletes have a responsibility to also put in the designated hours in their sport. A typical student is usually faced with balancing their social life in the college environment, maintaining personal relationships with friends and family, while also maintaining their grades. A student athlete is also faced with that same struggle as non-athletes but all of the demands, expectations, and pressures associated with their sport are added into the equation.

Since athletes spend more than 20 hours a week lifting weights, practicing, and watching film for their perspective sport (Gayles, 2009; Watt & Moore, 2001), it is almost inevitable that an athlete will struggle figuring out which role should have more weight and how to handle that issues resulting from that decision. On one hand, athletes are recruited to play sports for a particular school. On the other hand, they are at the school to get an education and that education can determine their eligibility to play their sport. They are called *student-athletes* with student being the first word but the debate

over what the students' priority should be is ongoing. However, various literature has attempted to explain each role and why it can be hard balancing the two.

Adler and Adler were among the first authors to address role conflicts among college athletes. Adler and Adler (1985) laid the foundation for the experiences that college athletes were having at that time. This led to a four year longitudinal study with a major university's basketball team to understand their experiences with role conflict. Their study focused on role expectations and how they impacted the student and athlete roles. The emphasis coaches put on sports over academics combined with being isolated in their dorms and their performance in the classroom determined how much conflict each athlete had with their different roles (Adler & Adler, 1987). The study concluded that it is important for athletes to identify with each role separately and commit to that decision.

Additionally, other articles focus on understanding the need to balance different roles (Settles et al., 2002) and the two different stages of dealing with role conflict (Miller & Kerr, 2003). For student athletes, it is nearly impossible to avoid having to split their attention between various aspects of being in college. There are three main categories that athletes find themselves trying to balance: athletic, academic, and social expectations (Miller & Kerr, 2003). If a student's main priority is getting prepared for a big game but they also have a test that same week, the decision about where to put more effort creates conflict. Games and practice are often as concrete as assignments and tests. Some adjustments can be made but in the end each of these activities are just part of being an athlete and a student. Miller and Kerr (2003), highlight the first stage of over-identification with the athletic role and the second stage of deferred role experimentation.

Each of these stages suggests that role conflict can be a dynamic process and this is part of being an athlete.

Identity discrepancy approach is a theory that has been written about regarding role conflict and student athletes. This theory suggests when individuals have various identities, each of which negatively impact the other, it can lead to conflict between the roles (Killeya-Jones, 2005). The success of the student athletes become dependent on how they are able to balance each role. There is no single way that each athlete can adjust to the different roles they face because everyone goes through the experience differently. Killeya-Jones (2005), talks about the importance of student athletes identifying separately with each role and organizing their expectations. If students are able to follow this plan effectively it is believed each role will not have a negative impact on each other and can lead to greater satisfaction.

McPherson (2013) explains role conflict as multiple stages that happen with identity and are dependent on when student athletes begin to focus more on their academic role versus athletics. Looking at the college experience as a whole, it is not a surprise that freshmen are usually faced with more doubt about adjusting to their environment and making their situation work. Being a first-year college student, as well as an athlete adds a tremendous amount of pressure before thinking about participating in any leisure activities. As time goes by and the situation becomes easier to maintain, there is a belief that athletes begin to find more of a balance between athletics and academics (McPherson, 2013). Familiarity and confidence with the athletic and academic roles can be the deciding factors that eliminate role conflict. Students, later on in their athletic careers, begin to accept their careers could be coming to an end and they dedicate more

time to their academic roles, even though their time obligation to athletics does not change (McPherson, 2013).

Perception is the biggest determinant of role conflict because different people see their situations differently. If these athletes step into a situation they are not comfortable with or they feel like they cannot handle everything being thrown at them, they are more likely to have a role conflict. Due to the fact that the majority of athletes identify with their athletic role over their student role (Adler & Adler, 1987; Lally & Kerr, 2005; McPherson, 2013; Miller & Kerr, 2003) it is imperative for the people who are around athletes to help them balance out their roles. Coaches, support staff, and professors all play an integral part in helping these students get on the right path. The amount of time coaches spend stressing the importance of education and allowing their students the space to excel in academics could be the difference in athletes balancing their role conflicts. Athletes are conditioned to excel at whatever they participate in and if a coach can instill winning with sports and academics student athletes can be more effective balancing their roles.

Faculty Perception

Student-athletes having people who support them can not only be a determining factor in how they perform academically, it can also impact athletic performance. Based on the number of classes student-athletes miss because of their respective sports, faculty becomes an important piece to their success in academics. There have been a plethora of articles centered on faculty at various universities and the roles they play in student-athletes' lives. Most faculty are aware of the time constraints placed on athletes compared to their counterparts, and the demand on their out-of-class time is understood (Lawrence,

Ott & Hendricks, 2009) However, there is still considerable fuzziness about how to get student-athletes and faculty working together more effectively.

Athletes' Perception of Faculty

One of the ways researchers have studied student-athletes and faculty relationships is by allowing athletes to share their experience. Simons, Bosworth, Fujita and Jensen (2007), conducted a study based on 538 collegiate athletes perceived treatment by facility. In this study the athletes revealed their experience of being stereotyped as having low intelligence, little academic motivation, and being unrecognized for benefits as well as privileges. Another study concluded that the different positive experiences student-athletes have with faculty have an impact on student-athletes obtaining their degrees (Bell, 2009). In this study researchers focused on the intellectual support faculty members provide to student-athletes. Williams, Colles and Allen (2010), were at a Division III institution and highlighted the student-athletes' perception of interactions with the faculty. Having faculty consistently involved in these athletes' lives has been shown to also increase athletic performance (Williams, Colles & Allen, 2010). More recently, athletes at a small private Division II university were surveyed and only 12% of the participants experienced negative perceptions on the part of faculty (Parsons, 2013). Each of these articles referred to an athletic stigma associated with athletes regardless of their grades. And, as with any human feeling, some of those stigmas are stronger and more persistent than others.

Race and Faculty

Race has also been a focus when exploring faculty perceptions of student-athletes. By way of measuring faculty about their personal feelings and initial reactions to people

of different races, involved in an athletic program, visual images were used in one study to determine how faculty participants responded to a student-athlete by race (Comeaux, 2010). The finding suggested that faculty have less favorable feelings towards Black male and female student-athletes compared to their White counterparts in their academic and post-undergraduate success (Comeaux, 2010). Similarly a study was conducted using 464 faculty members using the Situational Attitude Scale Student-Athlete and the finding revealed differences in the attitudes of student-athletes based on race, gender and college affiliation (Comeaux, 2011).

Feeling Disconnected

There are other faculty members who feel like they are disconnected from the world of athletics (Martin and Christy, 2010; Mamerow & Navarro, 2014). Due to practice schedules, travel time, and the amount of time student-athletes do miss from class faculty feel like they are not able to connect with these athletes. Being an integral part of the institution for learning and not playing a heavy role in the athletic department are some of the challenges faced by faculty (Martin and Christy, 2010).

Due to various ways that student-athletes can interact with faculty, it is important to understand how these two sides can come together to create a supportive learning environment. Creating a mentorship or even a social network of faculty members who can be a part of the athletic experience would be a tremendous help in bridging this gap. One of the hardest elements of faculty becoming more involved is the time commitment it would require away from their work (Lawrence, Ott & Hendricks, 2009).

Social Media and Athletes

Social media platforms have become integral parts of the college experience and have created a new way of communication for a multitude of topics (Sanderson, Browning & Schmittel, 2015). This has also opened the door for student-athletes and fans to have a different type of relationship than was possible in the past. Currently, Facebook, Twitter, Instagram, and Tumblr have 1.3 billion, 500 million, 300 million, and 216 million active users, respectively, across the world (Sanderson & Browning, 2015). These staggering numbers are daunting for college athletics because athletes can reach these millions of people with a single post. Due to this risk, the NCAA has made decisions about student-athletes' usage of these social media outlets. Social media training has also become a part of many athletic programs in order to educate student-athletes on conduct that is and is not acceptable.

Athletic programs like those at UNC, The University of Miami, and Boise State have all dealt with issues concerning their player's social media usage (Walsh, 2011). In each of these cases, athletes were posting comments that not only negatively reflected on them as players, but which were also a poor reflection on the institution. Due to these incidents, Student Athlete Handbooks and staffing in affected colleges and universities have been updated to include someone to monitor social media use by student-athletes. Some researchers have argued that banning and even monitoring their athletes' social media accounts interferes with first amendment rights (Hernandez, 2013; Walsh, 2011), but universities continue to make these decisions.

More and more universities are starting to use social media as a way to brand their institution. Students who write discriminatory, negative, or controversial comments bring

the wrong kind of media attention to these universities (Sanderson, 2011). For example, a USC football player tweeted about being upset over having to spend his winter break in a city like El Paso, Texas (Hernandez, 2013). This might not be a big deal to some, but since the athlete was representing USC, the city of El Paso was not happy, resulting in some tension between the city and university.

For fans, social media are ways they can have more of a connection with their favorite programs and access to information they might not otherwise have (Hipke & Hachtmann, 2013). They are able to defend their favorite athlete or be part of bashing an athlete based on their sports performance or anything an athlete posts. This can create an environment where an athlete feels he has to defend himself, which in turn could create unwanted attention for the university (Sanderson, Browning & Schmittel, 2015). However, the ability to be able to engage with fans or favorite players is a way of communicating and connecting that is not going away.

Social media allows the convenience of sending out messages whenever you want, and being able to check what people are saying about you just as easily (Sanderson, Browning & Schmittel, 2015). With athletes so visibly in the public eye and representing their university, it is important that they are educated about how to use these outlets effectively and appropriately. Social media have created a way for universities to communicate with fans in a way that is easier and more relatable than reading a newspaper. Since social media are just now showing their impact on various environments, this is a topic that is seeing a lot of growth and interest as more social media sites become popular among the college demographic.

Gender and Sports

Numerous scholars have directed their research to investigate gender differences in college athletic departments. Due to social expectations, men and women generally approach and participate in athletic departments differently. Harrison and Lynch (2005), conducted a study about how social roles impact athletes. They highlighted how men would prefer to be seen as athletic stars, while women would prefer to be remembered as school leaders. Similarly, Daltry and Chester (2013), discussed how male and female athletes can be perceived differently, just based on their visual appearance. For example, a woman who has a more masculine appearance, perhaps seeming to be more aggressive or more dominant creates a stereotype used to label particular female athletes. These types of comparisons can be uncomfortable and can lead to poor treatment of female athletes (Daltry & Chester, 2013; Diacin & Lim, 2012).

Another gender difference that is often written about is the equality of sports. Most athletic departments have more male than female sports, resulting in an imbalance of attention. In a study conducted by Hoeber (2008), men saw equality in athletics as benefiting women more so than men. Likewise, Mahony, Riemer, Breeding and Hums (2006), found that women were stronger supporters of equal disbursement and reductions of funds and opportunities, while their male counterparts believed decisions should be made based on the overall need for, and contribution to, the program. Since males are usually in revenue producing sports like football and basketball, their ideas of how the monies should be dispersed tend to be in line with their personal environment.

Other studies have compared men and women to see if they participated in sports for the same or similar reasons. Secondly, they wanted to see if both genders derive

similar gratification by playing sports. One study showed men reported higher motivation

from competition, being recognized by people socially, possessing strength, endurance,

performance ,and other ego-related factors, and being challenged when compared to

females (Kilpatrick, Hebert & Bartholomew, 2005, whereas in the same study, women

rated weight management higher than men did. Warner and Dixon (2015), reported men

and women viewed competition differently, which has an impact on their overall

experiences in their respective sport. It has been argued these differences are based in

large part on social and cultural norms that society has imposed on these gender groups

(Warner & Dixon, 2015).

Sports has been labeled as a male dominant world, and numerous sports

organizations have proven this to be true. In 1972, Title IX was a law that was introduced

to ensure that women and girls are treated fairly in athletic programs in terms of benefits

and resources. However, women do not coach men, nor do they commentate on men's

games, nor consistently referee them. Until there is more of a balance in women's

participation in all levels of sports, women will be viewed as participating in sports for

different reasons compared to males. Work-family conflict, gender ideologies, and male

dominated networks are all justifications that have been used not have women

represented equally in athletic departments (Diacin & Lim, 2012). The literature on this

topic is growing and conversations have moved into popular sports networks, so the

literature on this topic should expand.

To Pay or Not to Pay

A popular student athlete is one of the most visual representations of a university.

For example, when an athlete does really well at a particular school, on some level, they

are what people talk about when that school comes into a conversation. Johnny Manziel, and other players who generate similar levels of attention, are staple topics of conversation for student-athletes that creates attention and awareness for universities. Due to the power and attention these student-athletes bring to their universities, spectators and student-athletes themselves continue to wonder, "*Why don't student-athletes get paid*? There is not necessarily a right or wrong position on this issue, researchers have presented valid points on both sides, it simply illustrates another way student-athletes must deal with outside issues while attending college.

Paying Student-Athletes

There is literature that brings paying college athletes to the forefront of conversations. One of the reasons the idea of paying athletes is so prevalent in sports literature is because of the salaries paid to the coaching staff. Many people making the decisions on salary feel that since coaches run multi-million-dollar organizations, they deserve a $1- $4 million dollar salary (Weaver, 2011). Some coaches who coach bigger programs make more than that on a yearly basis. Nick Saban, Mike Krzyzewski, and John Calipari are head coaches who have a base salary of $7 million dollars or more (Sanderson & Siegfried, 2015). These coaches' salaries are determined by the revenue a school makes on a particular sport, the overall funds that school has available, donors, and of course by how their athletes perform (Weaver, 2011). The issue with this is, athletes whose performances result in their coaches getting higher salaries do not gain anything for their successes.

Another focus of the literature is universities and conferences which obtain large TV and endorsement contracts as another source of revenue which results from athletic

success. The *Big Ten Network* and *The Longhorn Network* are examples of TV channels

that focus on college sports. The total annual revenue stream for each of these networks is

$9 million (Weaver, 2011), and $15 million (Mondello et al, 2013, p. 108) respectively.

The Pacific-12 Conference signed a 12 year $3 billion contract with ESPN and Fox in

2011 (Gregory, 2013). BCS games in football as well as March Madness for college

basketball are two other special seasons where sports generate very high revenues

(Sanderson & Siegfried, 2015; Suggs, 2009; Weaver, 2011). CBS agreed to pay the

NCAA $6 billion over 11 years for March Madness and $320 million for BCS bowl

games over four years (McCormick & McCormick, 2010).

The NCAA regulates the amount of time an athlete can spend training and

practicing as a team at no more than 20 hours per week. However, athletes still have to

travel to games, play in games, and receive no additional benefit for dedicating this extra

time. Athletes usually report to school early for the start of the year (volleyball and

football), or have shorter Christmas and Spring Breaks (basketball, softball, soccer,

baseball, and track) because their sports are about to start, or are in progress. These are

more examples of extra time athletes spend on their sports with no compensation.

All of these factors, whether they involve marketing athletes via social media the

school's website, distributing fliers about an event, or displaying names on the backs of

uniforms, are ways universities make more money, and get more publicity, at the expense

of student athletes. An athlete who has their face on the school's website or on a billboard

in town, or on the highway, is not allowed to be paid for their face and their reputation to

be on that advertisement. Further, athletes are also not allowed to make money for selling

their autographs or any memorabilia they have per NCAA policy (McCormick & McCormick, 2010).

Not Paying Student-Athletes

On the other side of the coin some scholars believe there are valid reasons for not compensating student athletes. A very strong case is made by asking how a salary would be determined for athletes. For example, if you look at a football team there are 11 people on offense and just as many on defense. Do you pay certain positions more than other positions or does everyone get the same amount of money? What about someone who is on the team but who does not play as much as the star players? What is fair, and is pay based on talent or another factor (Sanderson & Siegfried, 2015). Similarly, what about various sports, do they make as much money as other sports? In most universities, football and men's basketball generate the most revenue (Sanderson & Siegried, 2015). Are they the only sports that should get paid? What about golf, tennis and softball?

Many scholars have argued that because many athletes receive scholarships and other bonuses that constitutes their compensation. Since they are *student-athletes* they are supposed to be in an environment where being a student is their top priority, not receiving a check to attend school.

The literature also highlights the balancing act of different conferences and how they impact the financial side of the NCAA by noting that not all universities are able to acquire these large contracts. That leaves the majority of schools in a bind as far as finances are concerned. There are the *Power Five* conferences (Harrison & Bukstein, 2014; Osborne, 2014), which includes the Big 12, SEC, PAC 12, ACC, and the Big Ten. These are the conferences that get large TV deals for their sports. The other conferences

do not have the luxuries of these deals. In fact some of these conferences do not make

any profit from their sports programs, and have to come up with different ways to

generate salaries for their athletic staff. If the Power Five conferences start to pay their

athletes, how do smaller schools compete?

One last reason the literature suggests it might not be a great idea to pay student-

athletes is because that would essentially make them an employee to their coaches. An

employee-boss relationship works very differently than a player-coach relationship. With

the average athlete being between the ages of 18-24 that would put them in an unique

situation where they would have to discuss contracts and make big decisions, without

much experience. That added pressure would just be another hurdle student-athletes

would have to overcome. An added expense of this negotiation would be having to have a

lawyer and an agent in order to make sure you make the best decision possible. This

alone could change the way the athletes prepare for their futures and the landscape of

college athletics.

There is not a right or a wrong answer to the question of whether student-athletes

should get paid for their contribution to college sports. In fact the literature gives

conflicting reasons for paying and not paying college athletes. These athletes bring

awareness to their respective schools and enable their coaches and universities to make

profits based on their talent. The question of student-athletes being compensated is not a

new topic in the literature, but as schools acquire bigger contracts and as the demand for

college sports grows, it is a conversation that is becoming more timely. Often, college

athletics gets just as much attention, if not more, for some sporting events, than

professional sports. And, since college athletics is viewed as the *front porch* for universities, this is a conversation that will not disappear any time soon (Buer, 2009).

Scandals Impacting Student Athletes

Another challenge that can impact athletes concerns getting class credit for classes that do not actually exist, or getting credit for completing classes based on someone else's work. One of the earliest controversial instances happened at Southern Methodist University (SMU). In the 1980s SMU was given the *death penalty* by the NCAA for recruiting violations (Gould, 2012). The death penalty is when an entire athletic program is shut down for one year. Over a period of time SMU was found guilty of paying their recruits and giving them benefits they were not supposed to have, which lead to the football program being cancelled entirely from 1987-1988. The impact on student athletes was somewhat alleviated as all the players were allowed to transfer to other schools. In March 1999, a story broke about the University of Minnesota being investigated on allegations that a basketball manager had written more than 400 papers for 20 players over a span of five years, this also resulted in a suspension for four players (Waters, 2012). At Florida State University, in 2007, 60 athletes, involved in over nine sports, were implicated for cheating on tests given over the internet (Glum, 2014). Other schools such as Ohio State University, the University of Tennessee, the University of Southern California, Auburn University, the University of Alabama, the University of Georgia, Fresno State University, St. Bonaventure University, East Carolina, Notre Dame, Southern University, the Naval Academy, the University of Virginia, and Harvard represent just some of the universities that have faced sanctions, suspensions, or fines by the NCAA for playing a role in helping their athletes get easy grades (Glum, 2014;

Gould, 2012; Hamilton, 2004; Mayo, 2011; Pennington, 2012; Rishe, 2011). Recently, the University of North Carolina (UNC) was once again in the news for a fake class giving students fake A's and B's over a span of almost two decades (Beard & Dalesio, 2014).

While all of these universities had their own separate scandals with their athletic departments, each one of these scandals has the potential to put a cloud over athletic programs across the country. An even bigger issue is the impact on students who are cheated out of an education that should have prepared them for their post-athletic careers. This also creates the image of athletes not having to work hard at school and impacts the student athlete's ability to take school seriously. When the supporting cast of people around the athletes, such as coaches, professors, counselors, tutors, and others consistently do not hold them accountable to being honest when it comes to academics, it contributes to a major role conflict, as their respect for grades diminishes.

Theories Typically Used in Writing About Athletics

Balancing identities is a normal part of being a student athlete. Three important roles that athletes have to balance are academic, social and athletic. Demands associated with each of these roles must be balanced in order for athletes to be successful in all environments. The literature highlights various theories of identity that have been researched in numerous studies concerning athletes. Self-determination theory and social identity theory are two philosophies that continuously appear in the literature. Each of these plays a role in how athletes perceive their responsibilities and consequently either excel, or under-perform, within their athletic environments.

Self-determination theory (SDT) focuses on motivation for the gratification that it can produce (Readdy, Raabe & Harding, 2014). The focus in SDT is on the need for competence, autonomy, and relatedness, which lays a foundation for humans (Hollembeak & Amorose, 2005). Along with an intrinsic motivation element, SDT brings into account an extrinsic motivation piece that can lead to an individual being determined. Intrinsic motivation focuses on an individual who engages in an activity for the specific pleasure derived from the activity (Hollembeak & Amorose, 2005). External motivation is used when the decision to engage in an activity is based on external reasons (Holmberg & Sheridan, 2013). When applying SDT to athletes, their ability to be intrinsically motivated relates to being stimulated while learning a skill, engaging in a skill, or accomplishing tasks. In practice, lifting weights, watching films, or any activity that provides an athlete the opportunity to improve their sport, employs intrinsic motivation. On the other end of the spectrum, making the coach happy, avoiding punishment, seeking approval, enjoying social elevation, or any outside force, is a way that athletes can be motivated extrinsically (Hollembeak & Amorose, 2005; Holmberg & Sheridan, 2013). In most of the conversations about SDT, athletes are used as an example of how this theory works and how it can influence an individual.

Social identity theory (SIT) was developed in an era of crisis, in the 1970s, as a way to explain horrors like the holocaust, and how groups create norms (Hornsey, 2008). Tajfel and Turner (1979), introduced SIT as a social-psychological theory that attempts to explain cognitions and behaviors with the help of group-processes (Trepte, 2006 p. 256). Social identity theory states that individuals make sense of the world by identifying in a social group they feel is important (Carlson & Donavan, 2013; Killeya-Jones, 2005;

Samuel & Tenenbaum, 2011; Yukhymenko-Lescroart, 2014). There are three

components of social identity theory, social comparison (individuals seeing if what they

believe in matches those in a particular group), social identity (a person's self-concept

together with the value and emotional significance attached to the group) and self-esteem

(the confirmation of their own self-definition and acceptance) (Stets & Burke, 2000;

Trepte, 2006. Each of these three components has an impact on how, or if, an individual

can identify with a particular group. A social group is a set of individuals who are able to

share a common identification or view themselves as a part of the same social category

(Stets & Burke, 2000). Being able to identify with a social group, or characteristics of

that group, is when SIT is at its strongest. There are various categories with which a

college athlete can identify throughout their career. Being a student athlete, engaging in a

specific sport, being a scholarship recipient, experiencing an injury, being a freshman,

sophomore, junior, senior, or being male or female, and any other way a group can be

formed in athletics, are all examples of how student athletes use social identity theory.

People behave in cohesion with the group they self-identify with (Stets & Burke, 2000),

and athletes seem to have a lot of elements in common. SIT can be carried out throughout

the nation and set a standard for what athletes deem as normal. For example, a school in

Ohio can see some ways that an athletic program in California is improving their athletes

or developing a style of play that is effective. Since both of these programs fall in the

same social group they are essentially able to imitate the other in hopes of getting

positive results. The power of SIT can be a very positive tool if the social groups use it in

that manner.

These two theories illustrate the environments that athletes find themselves in and explain how an athlete can feel comfortable in their environment as well as feel like an outcast. Self-determination theory is all about what drives an athlete to continue to not only be prepared at every phase of their games but also what can keep them focused on achieving their goals. Social identity theory can be used to explain how athletes can position themselves in their environment and what they hold themselves accountable.

College Athletes in Transition

There is not a lot of literature, past or present that talks about the transitions college athletes go through after their eligibility is finished in college. Regardless of whether these athletes go on to play professionally or enter a different workplace, the transition for these athletes is not always easy.

Pearson and Petitpas (1990) address commonly anticipated and unanticipated transitions faced by athletes. They point out that not making the team, experiencing a role change within the team, and injury retirement all function as barriers to successful transitioning. They discuss looks at transitions as developmental incidents, and explores how different feelings and reactions can be prevented. Although prevention is a great coping method, it is not something that can always be done. When someone has played their last game, they have poured their heart and soul into that effort. In the end, they still have to deal with what it means to not have that sport occupy the same place in their life as it once did. An individual can prepare themselves for these feelings, but how they deal with these feelings depends on a multitude of factors.

Baillie and Danish (1992) analyzed various aspects of the career transition process that happens with college athletes. The article examined the process of forming

an athletic identity in childhood, and determined how participating in sports becomes a way of life. While the study explored what the transition meant, ways to cope with the drastic change were an important part of the research. Although dealing with injuries is a common aspect in athletics, moving beyond this experience, becoming a former athlete in the process, was also addressed. The connection to the athletes' identities was linked to how that impacted their transition after their athletic careers had ended.

Wylleman and Lavallee (2004) investigated how the transition of college athletes can be an emotional experience not only for themselves, but the people that are in their close environment—including parents, children, and friends. Having family members who have been around, and who always associated this individual with a sport was a piece of someone's identity. While the element of transitioning can be related to the athletes themselves, parents and family members should be included in the transition process as well. While college athletes deal with their own fears and doubts about what is next for their lives and try to create a new identity, it becomes imperative to have a positive support system. This article also focused on the whole athlete and how that can affect how the individual is able to transition into different journeys. Understanding how people around the athletes behave contributes to better accommodating the athletes.

Each of these articles takes a various piece of college athletes in transition and explains what could happen in certain transitional phases. They also highlight struggles and situations that could arise, and the different effects they could have on individuals. It is important to realize, for athletes, meeting both the coach's expectations along with teammate expectations weighs heavily on them. Although figuring out the next step in life is an important part of transitioning out of the athletic life, self-searching and

understanding the pressures and expectations to come, can be an integral part of building up an athlete before they leave their sport. Transitioning is not something that colleges and universities have a class for, nor is it something that is talked about very often. When preparation becomes a piece of your everyday life, then suddenly that preparation falls solely on one person and dealing with this can be challenging.

<div align="center">**Methodologies Used in Past Research on Student Athletes**</div>

The main methodologies that have been used in previous research on this topic are quantitative methods for validation of measurement tools to measure athlete's feelings and perceptions (Chen et al., 2010; Huffman & Cooper, 2012; Killeya-Jones, 2005; Lavallee et al., 1997; Paule & Gilson, 2010). Other researchers have used qualitative methods such as interviews and case studies (Baillie & Danish, 1992; Lally & Kerr, 2005; Miller & Kerr, 2003; Schroeder, 2010), to explore the experiences of athletes and former athletes.

Each of these research techniques has advantages which have helped to solve problems and work through identified challenges. With most college athletic research, the goal is to understand the student athlete's environment and gather information that can improve the overall experience. An advantage of quantitative research is it provides measurement tools that can obtain data to help athletic departments function better because more people are able to participate in surveys. Qualitative research provides a space for athletes to tell their stories and talk about specific events that have made a positive or negative impact. Another advantage of qualitative research is the student athletes are able to give specific information about what can help their experience and ways to make the department be more beneficial to the athletes. For this study a

quantitative approach allowed more participants to be surveyed, which helped get more information on the overall population. Because college campuses are populated with a diverse group of people, using this method can also capture more diversity.

Career Exploration

The expectation for athletes to spend additional time on their sport practicing, playing in games, working out, or attending study hall comes along with the athletic environment (Tyrance, Harris & Post, 2013). Due to these demands on time, it can be challenging for student athletes to explore various career plans (Chen et al., 2010; Lally & Kerr, 2005). Career exploration is a topic that is briefly mentioned in various literature but not as much as other topics that more specifically pertain to athletes.

One of the more recent articles about career exploration focused on career planning and attitudes among NCAA Division I student athletes (Tyrance et al., 2013). In this study, participants were surveyed to determine their overall career adaptability, knowledge and optimism. Each of these was compared to the individual's identity, race, gender, sport, and their expectation to play professional sports (Tyrance et al., 2013). Lally and Kerr (2005) conducted a similar study but used interviews and the experiences of athletes to determine their career planning. In both studies, the particular sport, and the degree to which an individual identified as an athlete, impacted their overall career exploration. Implications of both articles suggest that career counselors and the NCAA can benefit from a better understanding of career exploration for college students in order to help them develop their future (Lally & Kerr, 2005; Tyrance et al., 2013).

Career exploration is a process that involves at least a basic understanding of where, how, how much, and what to investigate about careers and career opportunities

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(Stumpf, Colarelli & Hartman, 1983). From this definition it is important to understand all four of these categories as it relates to each participant.

Personality Type

Personality types provide insight into the foundation of an individual's personality and the impact personality has on an individual determines their trajectory. In particular, an individual's personality can be a factor in regards to how they perceive their current situation.

The variety of backgrounds and experiences that college students bring with them to campus, can play an important role in shaping a campus environment (Hyman & Van Jura, 2009). Intercollegiate student-athletes are a subgroup of students who frequently face adverse conditions (Galli & Reel, 2012).

The personality test that was used for this study is the Reduced Big Five Inventory - 29 (BFI - 29). The big five dimensions provide a model of personality structure that represents the co-variation among personality traits across individuals. It does not use single adjectives for items that need to be answered because those have shown less consistency (John & Srivastava, 1999). The BFI uses short phrases based on trait adjectives known to be prototypical markers of the big five. The BFI has 29 questions which are used to determine an individual's dominant personality type. It tests for five personality types, agreeableness, conscientiousness, extraversion, neuroticism and openness. Each of these personalities have different traits. The specific personality of an individual was one of the factors tested in this study to see if it predicts career maturity. Others have written about how personality can impact sports and individuals (Allen, Greenlees & Jones, 2011; Allen, Frings & Hunter, 2012). Each of these articles

highlights the five factors that make up the BFI. Even though the BFI originated in 1999, it is not commonly written about in the context of comparing college athletes and non-athletes and how personality types can be used as an impactful variable.

Reiter, Liput and Nirmal (2007) conducted a study that focused on the perceived personality types of college athletes versus their non-athlete counterparts. The study did not yield any statistically significant differences between perceptions of athletes and non-athletes. However, some results showed different personality types rated higher than others (Reiter et al., 2007). Environments that athletes and non-athletes experience could have an impact on these scores and provide more insight into how their personalities are perceived. Myers-Briggs Type Indicator was used as a personality measurement with results indicating that student athletes rated higher in feeling comfortable *sensing* their environment and being extroverts more than their non-athlete counterparts (Reiter et al., 2007). These results alone can be significant in determining variables that could impact an overall perception of college athletes and non-athletes. As indicated in these studies, personality tests can show how people see the world and can be a determinant for how individuals make decisions. For the current study each participant took a personality assessment to see if personality traits impact someone's ability to develop career maturity. Not many studies have examined the ability of psychological variables to the predict career maturity in student-athletes (Kornspan & Etzel, 2001). This study uses personality tests as a psychological variable and attempt to make that examination.

Career Decision Making Self-Efficacy

Bandura's (1977) self-efficacy article presented a new way to look at behavioral change and predict psychological changes. Self-efficacy allows for each individual to

evaluate their own expectations and ability to execute a certain behavior or complete a mission (Bandura, 1977). Building on Bandura's model, the career decision making self-efficacy scale (CDSMES) was created in order determine someone's self-efficacy with career decision making. This scale was selected from behaviors of the five career-choice competencies (accurate self-appraisal, gathering occupational information, goal selection, making plans for the future and problem solving) which were believed to be relative to career decision making (Taylor & Betz, 1983).

In 2000, Brown et al. conducted a study that used CDMSE as a variable to determine how athletes felt about their overall ability to make a decision. The mean CDMSE score for the sample of student-athletes was less than the mean reported by Betz et al. (1996) for their sample of college students. Conversely, Fogarty and McGregor-Bayne (2008), conducted a study in Australia that was an exact replica of the Brown et al. study, but their results showed athletes did not have less impact on career development self-efficacy. In the 2000 study, there were more males who were tested as well as more dominant sports, such as football, soccer and baseball, with football having a higher percentage surveyed at, 31% (Brown et al., 2000). The study in Australia, used netball, golf, swimming and triathlon, with netball contributing the highest percentage of 10% (Fogarty & McGregor-Bayne, 2008). In these two studies the CDMSE was used to understand how the athletes rated their own self-efficacy relative to career decision making.

Finch (2009), conducted research among student athletes across three division-one universities, about their roles as students and athletes and how that impacted self-efficacy for career decision-making. This study concluded that student identity for their

sample was a significant predictor of career decision-making self-efficacy (Finch, 2009). This highlighted the importance of these athletes gaining a student identity. Each of these studies utilized CDMSE as a measurement tool in order to show each participants expectations. Comparing student athletes and non-athletes will provide more research in the field, and give a more detailed outlook about the role CDMSE plays in the overall career maturity.

Socioeconomic Status (SES)

Investigating the literature on athletes who come from low income backgrounds compared to high income backgrounds reflects a story of disadvantage and struggle. Coakley (2008), suggests that many people in the US see sports as a sphere in which people from low-income and poor backgrounds can experience upward social mobility. If athletes are coming into college with the mindset of sports changing their life financially, this could backfire, depending on the struggles they experience during college. Loughran and Etzel (2008), suggest the culture of collegiate athletics may inadvertently contribute to the difficulties endured by some athletes from a lower SES background. Coming from an environment where money is not as freely used as others can impact an athlete tremendously on a personal level.

Not having family support through attendance, not having the proper dress attire for game days, and not being able to visit and see family during breaks can all be ways that an athlete can be negatively impacted by low SES. Not very much research has been conducted on low SES students' college experience or how attending college plays a role in their career preparedness. However, there have been studies that focus solely on African American student athletes' academic performance (Reynolds, Fisher & Cavil,

2012) and how specific players are impacted (Huffman & Cooper, 2012). Which may be relevant since many African American athletes come from a low SES background, given historic socio-demographics of the US. Low SES students are all around college campuses and it is important to give these students a voice. Social status can have an affect not only on a student's confidence, but also on their behavior. And, behavioral decisions can be costly. Although students with low SES backgrounds have been and will be the focus of policymakers, little is known about the impact on, and outcomes of, college for these students (Walpole, 2003).

Career Maturity

Before 2000 there were many researchers who were testing and writing about career maturity of college athletes (Blann, 1985; Brown & Hartley, 1998; Murphy, Petitpas, & Brewer, 1996; Smallman & Sowa, 1996). Some looked at the overall maturity of college athletes and others looked at different variables which could impact the athlete's career maturity. There were comparisons between athletes and non-athletes in college (Blann, 1985; Sowa & Gressard, 1983) as well as studies about just athletes (Brown & Hartley, 1998; Murphy et al., 1996). These studies showed that athletes had less career maturity than non-athletes (Blann, 1985; Sowa & Gressard, 1983), and when there was a relationship comparison between athletic identity and career maturity, a higher athletic identity correlated to a lower career maturity (Brown & Hartley, 1998; Murphy et al., 1996; Smallman & Sowa, 1996).

In 2001, Kornspan and Etzel examined the relationship of athletic identity, career self-efficacy, career locus of control and various demographic variables to test the prediction of career maturity at a junior college. This was the first study conducted for

junior college athletes to determine their overall career maturity (Kornspan & Etzel, 2001). The findings of this study revealed that career self-efficacy and career locus of control were the two variables that had the most impact on career maturity, which refuted the belief that athletic identity has the most significance of career maturity (Kornspan & Etzel, 2001). The study indicated that career locus of control and career self-efficacy were the most influential variables in the prediction of career maturity on junior college athletes.

Linnemeyer and Brown (2010), compared career maturity and career foreclosure to college athletes, fine arts students and general college students. The results of this study suggested that college athletes have lower career maturity when compared to both of these groups (Linnemeyer & Brown, 2010). The main difference between these two studies is Kornspan and Etzel's (2001) study was at a junior college, and they did not compare athletes to any other populations. Based on the amount of literature, variables, and different environments that have been studied, there is still a need for continual research in the area of career maturity.

Given the evolution of college sports, and the increased levels of attention and money college sports bring to a university, a variety of different learning opportunities are being created to help bridge the gap between athletes' career development relative to non-athletes (Shurts & Shoffner, 2004). However, these academic support services play an important role in empowering these individuals to make beneficial decisions (McPherson, 2013). If career maturity is a prerequisite of the ability to make wise and realistic occupational decisions (Busacca & Taber, 2002), it is an important tool for college students to have.

Conclusion

College can provide many unique opportunities for students as long as they are willing to work hard and stay motivated. College athletes in particular can teach lessons on the importance of healthy competition, work ethic, teamwork and overall personal awareness in order to be successful (Hyman & Van Jura, 2009). One of the perceptions of college athletes is that in order to remain eligible per NCAA rules they are able to put all their energy towards their sport, do minimum academic work, have easy classes and others are there to do their schoolwork (Simons, Bosworth, Fujita, & Jensen, 2007). Athletes experience their own challenges and have to find a way to remain successful in their environment. Gaining career maturity will play a role in college athletes leaving college knowing the options that are available after sports. Leaving college with a high level of confidence, direction and stability will be helpful for these student athletes.

III. METHODOLOGY

The methodology section provides an overview of the analytic method, study design, key terminology, endogenous and exogenous variables that were used to develop a path model to determine the statistically significant variances in career maturity between student athletes and non-athletes. This study is designed to understand statistical significance with a set of variables that were measured against college students at a Division I University in Central Texas. This chapter is divided into 11 sections: (a) analytic method, (b) study design and theoretical basis, (c) variables in the study, (d) instruments, (e) path analysis model development, (f) path analysis symbol identification, (g) population and sample, (h) data collection, (i) data screening, (j) data analysis, and (k) key terminology related to path analysis modeling and correlations, and a summary.

Analytic Method

Path analysis is the analytical method that was used to determine the significance of the correlations of the endogenous and exogenous variables. This method is appropriate for three reasons: (a) variables are explicitly specified as to how they relate to one another, (b) it allows the researcher to break down the various factors affecting an outcome into direct effects and indirect components (Lleras, 2005), and (c) it provides the ability to simultaneously assess various types of relationships and compare similarities and differences between groups in a study (Olobatuyi, 2006, p. 12). For this study, Streiner's (2005), path analysis concepts were used in order to effectively examine the complexity of the model and compare the different groups (p. 115).

Study Design and Theoretical Basis

This research was examined from the perspective of college students from one Division I university in central Texas. Athletes, non-athletes, gender and academic classification and race were the groups that were compared. Based on recent growth, and its proximity to major cities and new organizations in surrounding areas, this university provided a desirable study location. Having a variety of different sports and various students on campus who are involved in a range of activities will help to have a diverse sample.

Prior to conducting this research the athletic director and academic advisors met with the principal investigator in order to determine the best times to survey their athletes. Each sport was in charge of creating their own time to allow the students to complete their surveys. Some were conducted during study hall, before and after practice. Due to the track and field team being so spread out and not having a chance to catch them all at the same time, they were given the same survey online. The study took place in the Spring 2015 semester and all the students were currently enrolled at the university.

Working within a critical realist framework, this study will provide context about how participants assess their current situation. Critical realism also produces an explanation that identifies entities and mechanisms that connect to individuals (Easton, 2010). Each participant will have the ability to pick the connections that speak to their world.

Variables in the Study

The exogenous variables were Career Exploration (CES-R), Personality Type (BFI - 29) and Career Decision Making Self-Efficacy (CDMSE-SF) and Socioeconomic Status (SES). The endogenous variable is Career Maturity (CMI-AS).

Instruments

There are six instruments that were used for this research. They include: (a) a demographic instrument which determined the classification of the participants, (b) the Career Exploration Survey (CES-R) which measures how much the participant has explored career options, (c) the Personality Test (BFI - 29) that determined their personality type, (d) the Career Decision Making Self-Efficacy Scale-Short Form (CDSME-SF) that determined their ability to make a career decision, (e) a socioeconomic status measurement (SES) that determined the social background of each participant, and (f) the Attitude Scale of the Career Maturity Inventory (CMI-AS) that determined the overall career maturity of each participant. Together these instruments provided an explanation of the impact of each variable. Each of these instruments were a part of a packet that was passed out, by the researcher, to each participant for completion Some participates also were able to take the survey from an online link, that was identical to the pen and paper survey. Each of these instruments is discussed in greater detail below.

(a) *Demographic Instrument.* A demographic instrument was created to have the student-athletes and non-athletes document their responses to questions about how they identify. These questions include age, gender, academic classification, major name the sport they participate in, if applicable, identity as a college athlete or non-athlete and the option of identifying their ethnicity.

(b) *Career Exploration Survey.* The Career Exploration Survey (CES) is a measurement tool that was used to gauge career-search activities, reactions to exploration and beliefs about exploration opportunities (Stumpf et al., 1983). Developing the instrument over four different studies, with an undergraduate population; a coefficient alpha of .88 was reported. An example of a sample question is, "Obtained information on specific jobs or companies."

This measurement tool is a self-exploration assessment that requires individuals answer questions so their classification can be determined. There are three dimensions that are measured in the CES instrument that are used to determine an individual's exploration process, reactions to exploration and beliefs (Stumpf et al., 1983). Each one of these dimensions is determined by answering 28 questions on a Likert scale from 1 being *never* to 5 being *a great deal* to determine how much an individual is engaging in career exploration. Extant research demonstrates the CES does not have any gender biases and has the ability to predict meaningful career exploration outcomes (Stumpf et al., 1983). CES was helpful for the study and used as a variable to determine the impact of career maturity among all participants.

(c) *Personality Test.* The reduced Big Five Inventory - 29 was developed to measure the five personality factors of: (a) agreeableness (good-natured, unselfish, and forgiving), (b) conscientiousness (organized, punctual, and hardworking), (c) extraversion (sociable, outgoing, and active), (d) neuroticism (anxious, hostile, and irritable), and openness (curious, creative, and imaginative) (John & Srivastava, 1999). The original BFI tool had a total

of 44 questions, but a recent study concluded that some of the questions were not properly worded and could lead to a discrepancy when participants were answering questions (Leung, Wong, Chan and Lam, 2013). Due to this finding the BFI - 29 was used to determine which personality type is ranked highest among each participant. Participants are required to indicate on a 5-point scale from *strongly disagree* to *strongly agree*, if the statement identifies them.

For the current study the reliability for each personality type is as follows: Agreeableness .69, Conscientiousness .71, Extraversion .72, Neuroticism .81 and Openness to experience .77 for an average of .74. The subscale with the highest rating determined the individual's most dominant personality to the lowest number being the least dominant. Identifying each student's personality was a substantial factor to see if it had an impact on career maturity. This measurement also provided an opportunity to see if student athletes are different from their non-athlete counterparts. The BFI has shown adequate levels of validity and reliability across a range of diverse groups and this measurement was effective for the sampled population.

(d) *Career Decision Making Self-Efficacy Scale- Short Form.* The career decision-making self-efficacy scale (CSMSE-SF) was a scale that was created in order to measure an individual's career behaviors. The original form is 50 items and was longer than most researcher and career counselors wanted to use (Betz et al., 1996). Developing a CDMSE-SF that was as reliable and effectively measured self-appraisal, occupational information, goal selection, planning and problem solving that were taken from the long form created by

Taylor and Betz, in 1983, was imperative. The CDMSE-SF, was reduced to 25

questions and the total score was derived from the sum of all five scale scores

(Betz et al., 1996). The alpha value of .94 for the 25 item scales that the

subscales are sufficient and provide a highly homogeneous general construct

(Betz et al., 1996). The CDMSE-SF uses a Likert scale to gauge confidence

level, with the highest being *complete confidence* and the least being *no

confidence at all*. A sample question is, "*How much confidence do you have

that you could: Determine what your ideal job would be*?"

CDMSE-SF is based on social-cognitive theory and was tested exclusively

among college students (Luzzo, 1996). For the purpose of this research this

scale was assumed to produce valid and reliable information for college

students and college athletes. College sports places different demands on

student-athletes which exceed the demands that are placed on non-athletes

(Brown et al., 2000). It was important to uncover the thoughts about athletes

and non-athletes in this study. Additionally, exploring multiple sports within

the context of self-efficacy helped to eliminate potential stigmas that one sport

might have over others (Shelangoski, Hambrick, Gross & Weber, 2014).

(e) *Socioeconomic Status.* A socioeconomic status (SES) questionnaire was

developed in order to get a better picture of each participant's perceived

background. What is the zip code where the participant grew up (Huffman and

Cooper, 2012), were you on reduced lunch in grade school (Dickinson &

Adelson, 2014), and highest level of education for both parents (Dickinson &

Adelson, 2014; Reynolds et al., 2012; Walpole, 2003), were questions that were used to determine each participants SES.

(f) *Career Maturity Inventory - Attitude Scale.* The Career Maturity Inventory Revised (CMI-R) includes questions that are appropriate for postsecondary adults and eliminate items that could be influenced by race, ethnicity and gender (Busacca & Taber, 2002). The CMI-R is a 50 item instrument that is used to determine the maturity of attitudes and realistic decision making (Crites & Savickas, 1996). There are two parts to the instrument, that each has 25 questions, an attitude scale (AS) and competency (C) test that give a number indicating an individual's career maturity.

For this study, only the Attitudinal Scale of the CMI-AS was used. This scale measures feelings, subjective reactions, and dispositions that an individual could potentially have on making a career choice and entering the workplace after college (Esters & Retallick, 2013). Each question has an "A" indicating *Agree* and "D" indicating *disagree* and a sample question is, "*It is probably just as easy to be successful in one occupation as it is in another.*" At the end of the assessment an overall score of career maturity, ranging from 1 to 25 determined the overall level of career maturity, 1 being the lowest and 25 being the highest. This scale was more efficient to complete for the participants and has been used for different research when measuring college students (Kornspan & Etzel, 2001). Crites (1978) reported internal consistency for the five subscales of the CMI-AS ranging from .65 to .84, with a combined average of .74, and suggested the revised instrument should have

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a similar reliability and validity since the items were replicas of the older

version (Basacca & Taber, 2002; Crites & Savickas, 1996; Esters & Retallick,

2013; Kornspan & Etzel, 2001).

Table 1
Variables Measured, Instrument Used, and Level of the Variable

Variables	Instrument	Level of Variable
Career Exploration	CES	Ordinal
Personality Type	BFI - 29	Interval
Career Decision Making Self-Efficacy	CDMSE-SF	Ordinal
Socioeconomic Status	SES Question	Ordinal
Career Maturity	CMI-AS	Nominal

```
┌──────────────────┐
│ Career Exploration │──────┐
└──────────────────┘       │
                            ↓
┌──────────────────┐   ┌──────────────┐          ┌────────────────┐
│ Personality Test  │──▶│ Socioeconomic │────────▶ │ Career Maturity │
└──────────────────┘   │    Status     │          └────────────────┘
                        └──────────────┘
┌──────────────────┐
│ Career Decision   │──────┘
│ Making Self-      │
│ Efficacy          │
└──────────────────┘
```
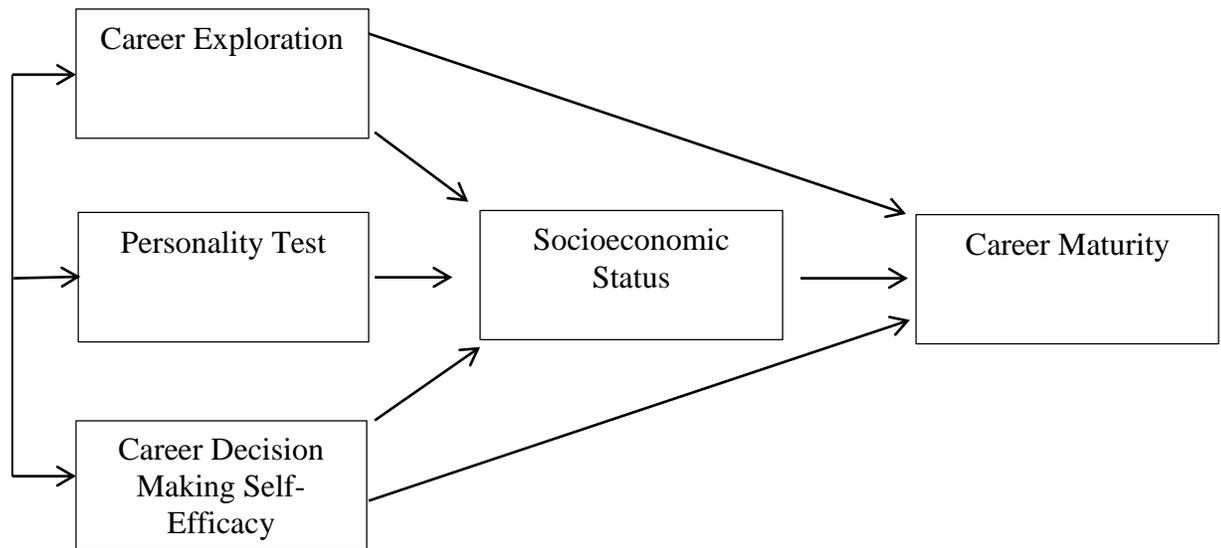
Figure 1: Path Analysis Model. This model was used across college athletes and non-athletes.

Path Analysis Model Development

Model development is a tool that is used in path analysis to convey to the reader the exogenous, endogenous and mediator variables. The placement of each variable highlights the path of each relationship. The objective of this path analysis was to create a model that can be supported by current research and tested for significance. The mediator variable is in place to explain the relationship between the endogenous and exogenous variables. A mediator variable can have a positive, negative or no impact on the outcome of a dependent variable. In this model the mediator variable is socioeconomic status because it is important to see if socioeconomic status impacts the relationship between the independent variables and dependent variables alone.

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Symbol	Definition
	Boxes represent a measured variable that is either an exogenous or endogenous variable.
$\longrightarrow$	A straight single headed arrow represents a regression parameter between variables.
$\longleftrightarrow$	A multi-headed arrow indicates a covariance
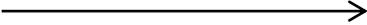
Figure 2: Path Analysis Symbol Identification. Curran, P. J. & Bauer, D. J. (2007). Building path diagrams for multilevel models, *Psychological Methods*, 12(3), 283-297.

Population and Sample

The population that was targeted were students at a Central Texas University and all respondents had an option to not participate based on the consent form that was the first page of the survey. Non-traditional students (students beyond the age of 24) were excluded from the study because that was the maximum age of college student's athletes at the University. Furthermore, it was important to compare students that possibly resemble the same stages in life as the study athletes in the study as compared to non-traditional students who might be on their second degree, re-entering college, engaging in different types of peer relationships or already holding a career in their chosen fields. The sample for the student athletes was purposeful sampling because athletics is a hard environment to gain access to. For the non-athletes, the sample was a networking sample. Participants were a result of professors being willing to allow their classes to be surveyed based on the researcher asking for referrals for other classes.

A total of 637 undergraduate students responded to the survey; however, 502 (78.8%) of these participants were used. The participants that were not used were

screened out due to their age, only circling one response on every variable assessment (ex. all 1's or all 3's), finishing the survey in less than four and a half minutes and surveys that were incomplete were all not used for analysis. Participants ranged in age from 18 to 24, with a mean age of 20.0. The majority of students were female (n=332, 66.1%) and White (n=273, 54.4%). The academic classification breakdown is as follows freshman n=130 (25.9%), sophomores n=139 (27.7%), juniors n=130 (25.9%) and seniors n=103 (20.5%). There were 287 (57.2%) non-student athletes and 215 (42.8%) student-athletes.

Data Collection

Each packet of surveys was handed out to the participants and in the instances that an online survey was used there was a link sent out. The surveys took about 10 minutes to be completed online and 13 minutes to be completed with paper and pencil. Each survey was given a unique number in order to keep track of the participant number. Students participating in all the sports on the Central Texas University were included in the surveys along with students from various subject areas around campus.

Data Analysis

Path analysis is a flexible and powerful statistical methodology used to examine relationships between measured variables. The variables that are being tested can estimate if the relationships are positive, negative or even zero to show if this model is supported by the data (Lleras, 2005). Surveyed responses were used to determine the statistical relationships among the variables. The output from each variable was used to determine the significance of the relationship of all variables. Each variable produced

path coefficients which are highlighted on the path diagram to explain statistical relationships.

The sampled population data from the Central Texas University were entered into IBM Statistical Package for the Social Sciences (SPSS version 23), in order to obtain descriptive information for each participant's age, gender, academic classification, sport information, major, ethnicity/race and SES data. Once all the information was into SPSS, the Analysis of Moment Structures (AMOS, version 23.0), software was used in order to get statistical information on each variable as well as to test each path of the variables. Academic classification, gender, athletes, non-athletes and races were he five groups that broken down in order to test for significance.

To better understand the statistical significance between group's z-scores were performed to determine if any significance difference would occur based on gender of athletes, academic classification of freshman and seniors, athletes and non-athletes.

Summary

Conducting this research was intended to provide an insight into how two different student environments (those of student athletes and non-athletes) feel about their current maturity. It is the assumption of critical realism that the natural and social worlds are combined and provide more evidence for people in various situations. Path analysis will combined the environments and ensure that all relationships be tested and each path was evaluated to understand the influence (Olobatuyi, 2006, p.13). Every variable in this study is an important component of the students overall perception. Surveying students on the same campus was intended to provide awareness that can also be very helpful to the University.

IV.   RESULTS

This chapters offers the results of the statistical analysis for each investigative path in order to test the 11 hypotheses presented in the study. This chapter is broken down in four sections: a) descriptive statistics, b) path diagram, c) statistical evaluation of the research questions, and d) overall analysis.

Descriptive Statistics

A total of 637 undergraduate students responded to the survey however, 502 (78.8%) of these participants were included in the analysis based on age, amount of time to complete the survey, and the number of questions answered. The response rate among student athletes was 67%. Participants ranged in age from 18 to 24, with a mean age of 20.0. The majority of students were female (n=332, 66.1%) and White (n=273, 54.4%). The academic classification breakdown is as follows: freshmen n=130 (25.9%), sophomore's n=139 (27.7%), junior's n=130 (25.9%) and senior's n=103 (20.5%). There were 287 (57.2%) non-student athletes and 215 (42.8%) student-athletes. For a completed list of the participant's breakdown of age, gender, academic classification and race please see tables below.

Table 2
Distribution of Sampled Population

		Age	Gender	Academic Classification	Race	Sport
N	Valid	500	502	502	502	502
	Missing	2	0	0	0	0
Mean		20.00		2.410		
Minimum		18		1.0		
Maximum		24		4.0		

Table 3
Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18	75	14.9	15.0	15.0
	19	130	25.9	26.0	41.0
	20	132	26.3	26.4	67.4
	21	80	15.9	16.0	83.4
	22	58	11.6	11.6	95.0
	23	18	3.6	3.6	98.6
	24	7	1.4	1.4	100.0
	Sub-Total	500	99.6	100.0	
Missing	System	2	.4		
	Total	502	100.0		

Table 4
Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	F	332	66.1	66.1	66.1
	M	170	33.9	33.9	100.0
	Total	502	100.0	100.0	

Table 5
Academic Classification

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	130	25.9	25.9	25.9
	2.0	139	27.7	27.7	53.6
	3.0	130	25.9	25.9	79.5
	4.0	103	20.5	20.5	100.0
	Total	502	100.0	100.0	

Table 6
Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Black	89	17.7	17.7	17.7
	Hispanic	112	22.3	22.3	40.0
	Other	28	5.6	5.6	45.6
	White	273	54.4	54.4	100.0
	Total	502	100.0	100.0	

Table 7
Sports

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Baseball	29	5.8	5.8	5.8
	Football	40	8.0	8.0	13.7
	Mens_Basketball	6	1.2	1.2	14.9
	Mens_Golf	2	.4	.4	15.3
	Non_Athletes	286	57.0	57.0	72.3
	Soccer	23	4.6	4.6	76.9
	Softball	18	3.6	3.6	80.5
	Strutters	2	.4	.4	80.9
	Tennis	7	1.4	1.4	82.3
	Track_and_Field	60	12.0	12.0	94.2
	Volleyball	16	3.2	3.2	97.4
	WBB	8	1.6	1.6	99.0
	Womens_Golf	5	1.0	1.0	100.0
	Total	502	100.0	100.0	

Below is an overview of the Path Analysis Model that was used in order to assess the significance of each measurement.
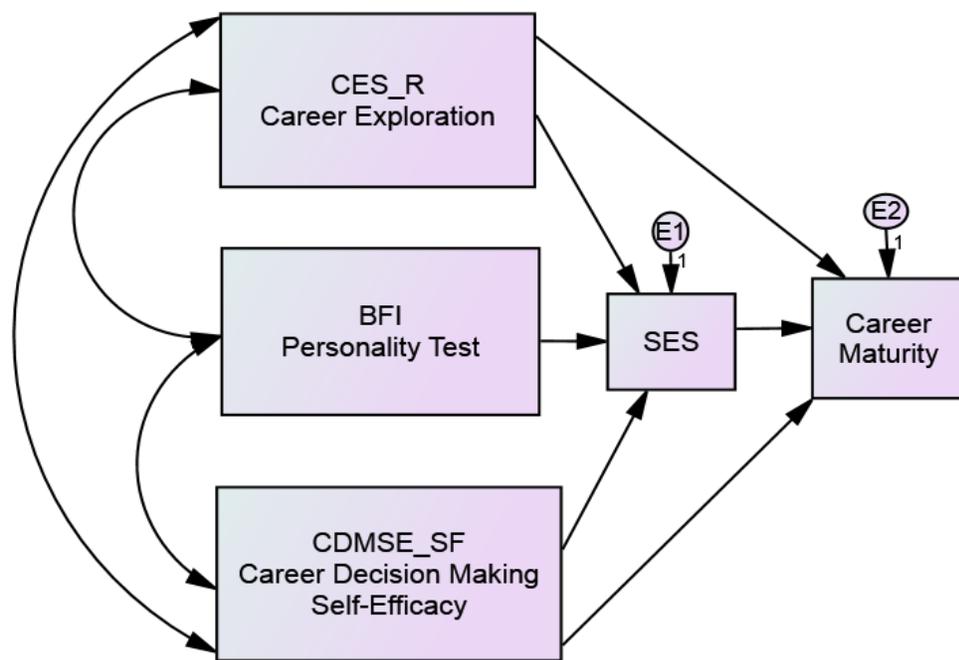
Figure 3. Research Model to Assess Measurement Significance.

Specific Research Questions and Explanation

Table 8 shows the parameters for the default model for all of the students in the model. The statistic *b* is the slope of the relationship between the two variables. A negative number indicates that when the value of one variable goes up, the value of another goes down. S.E. is short for standard error and is a measure of the variability of the relationship. C.R. is the test statistic (equivalent to *z* in a z test). In general, when *z* is larger than 1.96, the relationship is significance. The statistic *p* is the probability that the relationship is random. For this study, the level of significance, α, is set to .05. Therefore, if *p* is less than .05 ($p > .05$), there is a statistically significant relationship (we reject the null hypothesis). The statistic *r* is the standardized relationship and is a measure of effect size or practical significant. It ranges from -1 to 1. Effect sizes are generally cited as small (+/-.1), medium (+/-.3) and large +/-.5) (Cohen, 1988).

Table 8
Default Model Parameters

			b	S.E.	C.R.	p	r
SES_Number	<---	CES_R	-.181	.100	-1.804	.071	-.094
SES_Number	<---	BFI	-.318	.204	-1.557	.120	-.079
SES_Number	<---	CDMSE_SF	.270	.114	2.379	.017	.132
CareerMaturity	<---	SES_Number	.004	.005	.934	.350	.039
CareerMaturity	<---	CES_R	-.003	.010	-.283	.778	-.014
CareerMaturity	<---	BFI	.012	.021	.574	.566	.027
CareerMaturity	<---	CDMSE_SF	.079	.012	6.680	<.001	.349

1. **To what degree is career exploration a reliable predictor of career maturity?**

    The statistical analysis does not support the assertion that career maturity is

    dependent on career exploration.

    $$(C.R. = -.28, p = .78, r = -.01)$$

2. **To what degree is personality type a reliable predictor of career maturity?**

    The statistical analysis does not support the assertion that career maturity is

    dependent on personality type.

    $$(C.R. = .57, p = .57, r = .03)$$

3. **To what degree is career decision self-efficacy a reliable predictor of career**

    maturity?

    Career maturity has a medium, statistically significant relationship with career

    decision making self-efficacy.

    $$(C.R. = 6.68, p < .01, r = .35)$$

4. **To what degree do career exploration, personality type and career decision**

    self-efficacy collectively predict career maturity when included in a single

    prediction model?

    The model explains 13% of the variance of the outcome variable, career maturity.

5. **In what way, if any, does socioeconomic status mediate the relationship**

    between career exploration and career maturity?

    There is no statistically significant relationship between career exploration and

    career maturity

    $$(C.R. = -1.804, p = .071, r = -.094)$$

6. **In what way, if any, does socioeconomic status mediate the relationship between personality type and career maturity?**

    There is no statistically significant relationship between personality type and career maturity.

    $$(C.R. = -1.557, p = .120, r = -.079)$$

7. **In what way, if any, does socioeconomic status mediate the relationship between career decision self-efficacy and career maturity?**

    The null hypothesis is rejected because SES is a significant mediator of the relationship between career decision making self-efficacy and career maturity. As SES goes up the relationship between the two other variables (career decision making self-efficacy and career maturity) gets stronger.

    $$(C.R. = 2.379, p = .017, r = .132)$$

    In order to answer the next set of question, the data were divided into several paired groups of students (athletes/non-athletes), gender (male/female), academic classification (freshmen/seniors) and race (Black /White, and Hispanic /White). The model was then run for each group and the statistics for each group were compared using a t-test. If the relationships are different for any of these groups this test yields a statistically significant relationship with $p < .05$.

8. **What is the statistical difference, if any, between the athletes and non-athlete groups on research questions 1-7?**

    To answer this question, the results of athletes and non-athletes were compared.

Table 9
Non-Athletes Model Results

		b	S.E.	C.R.	p	r
SES_Number <---	CES_R	-.103	.129	-.799	.424	-.055
SES_Number <---	BFI	-.425	.278	-1.527	.127	-.104
SES_Number <---	CDMSE_SF	.180	.152	1.186	.235	.086
CareerMaturity <---	SES_Number	.007	.006	1.141	.254	.064
CareerMaturity <---	CES_R	.015	.014	1.101	.271	.072
CareerMaturity <---	BFI	.021	.030	.706	.480	.046
CareerMaturity <---	CDMSE_SF	.059	.016	3.653	<.001	.253

Table 10
Athletes Model Results

		b	S.E.	C.R.	p	r
SES_Number <---	CES_R	-.232	.166	-1.398	.162	-.109
SES_Number <---	BFI	-.199	.301	-.662	.508	-.050
SES_Number <---	CDMSE_SF	.385	.171	2.247	.025	.186
CareerMaturity <---	SES_Number	.001	.007	.141	.888	.009
CareerMaturity <---	CES_R	-.037	.016	-2.281	.023	-.165
CareerMaturity <---	BFI	.001	.029	.044	.965	.003
CareerMaturity <---	CDMSE_SF	.102	.017	5.981	<.001	.462

The significant relationship for non-athletes is the same as it was for the total population.
However, for athletes, the picture changes and the relationship between career decision-making self-efficacy and SES is significant.

(C.R. = 2.25, p = .02, r = .19).

There is also a statistically significant relationship between SES and career maturity for athletes.

$$(\text{C.R.} = -2.28, p = .02, r = -.16).$$

In order to test for statistical significance in these two models, each of the statistics were entered into the following equation to generate a z-score:

$$z = \frac{b_1 - b_2}{\sqrt{SE_{b_1}^2 + SE_{b_2}^2}}$$

If the relationship between two groups, athletes and non-athletes, is significant, the z will be greater than +/- 1.96.

Table 11

Non-Athletes Compared to Athletes

			Athletes		Non-Athletes			
			b1	SE1	b2	SE2	z	p
SES_Number	<---	CES_R	-0.232	0.166	-0.103	0.129	-1.271	0.178
SES_Number	<---	BFI	-0.199	0.301	-0.425	0.278	0.907	0.264
SES_Number	<---	CDMSE_SF	0.385	0.171	0.180	0.152	1.178	0.199
CareerMaturity	<---	SES_Number	0.001	0.007	0.007	0.006	-10.936	<.001
CareerMaturity	<---	CES_R	-0.037	0.016	0.015	0.014	-10.389	<.001
CareerMaturity	<---	BFI	0.001	0.029	0.021	0.030	-5.493	<.001
CareerMaturity	<---	CDMSE_SF	0.102	0.017	0.059	0.016	2.820	.007

For the variable career maturity, the relationship to predictor variables is statistically different between the two groups, athletes and non-athletes.

Career decision-making self-efficacy is a stronger predictor of career maturity for non-athletes than athletes ($z = 2.82, p = .007$).

However, SES ($z = -10.94, p < .001$), career exploration ($z = -10.39, p < .001$), and personality type ($z = -5.49, p < .001$) are stronger predictors of career maturity for athletes than non-athletes.

9. What is the statistical difference, if any, of gender across athletes on research questions 1-7?

To answer this question, we will compare results of male athletes to female athletes

Table 12

Female Athlete Results

			b	S.E.	C.R.	p	
SES_Number	<---	CES_R	-.295	.242	-1.217	.224	-.134
SES_Number	<---	BFI	-.592	.422	-1.402	.161	-.139
SES_Number	<---	CDMSE_SF	.323	.240	1.345	.179	.154
CareerMaturity	<---	SES_Number	.006	.007	.756	.450	.061
CareerMaturity	<---	CES_R	-.040	.019	-2.122	.034	-.202
CareerMaturity	<---	BFI	.016	.033	.482	.630	.041
CareerMaturity	<---	CDMSE_SF	.113	.019	5.986	<.001	.595

Table 13
Male Athlete Results

			b	S.E.	C.R.	p	r
SES_Number	<---	CES_R	-.176	.225	-.780	.435	-.086
SES_Number	<---	BFI	-.052	.465	-.112	.910	-.013
SES_Number	<---	CDMSE_SF	.470	.246	1.914	.056	.227
CareerMaturity	<---	SES_Number	-.003	.012	-.270	.787	-.026
CareerMaturity	<---	CES_R	-.035	.027	-1.316	.188	-.140
CareerMaturity	<---	BFI	-.010	.055	-.183	.855	-.020
CareerMaturity	<---	CDMSE_SF	.090	.030	3.055	.002	.358

Table 14

Male Athletes and Female Athletes Compared

			Female Athletes		Male Athletes			
			b1	SE1	b2	SE2	z	p
SES_Number	<---	CES_R	-0.295	0.242	-0.176	0.225	-0.711	0.310
SES_Number	<---	BFI	-0.592	0.422	-0.052	0.465	-1.398	0.150
SES_Number	<---	CDMSE_SF	0.323	0.240	0.470	0.246	-0.522	0.348
CareerMaturity	<---	SES_Number	0.006	0.007	-0.003	0.012	15.000	<.001
CareerMaturity	<---	CES_R	-0.040	0.019	-0.035	0.027	-0.628	0.328
CareerMaturity	<---	BFI	0.016	0.033	-0.010	0.055	6.962	<.001
CareerMaturity	<---	CDMSE_SF	0.113	0.019	0.090	0.030	1.044	0.231

SES is a stronger predictor of career decision-making self-efficacy for female athletes than male athletes.

$$(z = 6.92, p<.001)$$

Likewise, personality type is a stronger predictor of career maturity for female athletes than it is for male athletes.

$$(z = 6.92, p<.001)$$

10. What is the statistical difference in academic classification between freshman and seniors on researcher questions 1-7?

To answer this question, the model was run for freshmen and seniors. Changes will show as significant differences in the tables below.

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Table 15

Model Applied to Freshman Students

			Estimate	S.E.	C.R.	P	Label
SES_Number	<---	CES_R	-.107	.175	-.612	.540	-.064
SES_Number	<---	BFI	-.685	.377	-1.818	.069	-.182
SES_Number	<---	CDMSE_SF	.277	.182	1.519	.129	.164
CareerMaturity	<---	SES_Number	.008	.009	.860	.390	.070
CareerMaturity	<---	CES_R	.017	.019	.910	.363	.087
CareerMaturity	<---	BFI	.110	.041	2.704	.007	.252
CareerMaturity	<---	CDMSE_SF	.035	.020	1.757	.079	.176

Table 16

Model Applied to Senior Students

			Estimate	S.E.	C.R.	P	Label
SES_Number	<---	CES_R	.204	.219	.929	.353	.109
SES_Number	<---	BFI	-.510	.472	-1.079	.281	-.122
SES_Number	<---	CDMSE_SF	-.087	.297	-.293	.770	-.036
CareerMaturity	<---	SES_Number	.013	.010	1.343	.179	.120
CareerMaturity	<---	CES_R	-.032	.021	-1.515	.130	-.161
CareerMaturity	<---	BFI	-.010	.046	-.212	.832	-.022
CareerMaturity	<---	CDMSE_SF	.136	.029	4.709	***	.515

Table 17

Freshman and Senior Students Compared

			Freshmen		Seniors			
			b1	SE1	b2	SE2	z	p
SES_Number	<---	CES_R	-0.107	0.175	0.204	0.219	-2.950	0.005
SES_Number	<---	BFI	-0.685	0.377	-0.51	0.472	-0.320	0.379
SES_Number	<---	CDMSE_SF	0.277	0.182	-0.087	0.297	2.859	0.007
CareerMaturity	<---	SES_Number	0.008	0.009	0.013	0.01	-3.322	0.002
CareerMaturity	<---	CES_R	0.017	0.019	-0.032	0.021	9.431	<.001
CareerMaturity	<---	BFI	0.11	0.041	-0.01	0.046	5.363	<.001
CareerMaturity	<---	CDMSE_SF	0.035	0.02	0.136	0.029	-4.265	<.001

Based on table 17, there is a large significance between freshman students and senior students. SES has a much more positive relationship to CES for seniors than freshmen.

$$(z = -2.96, p = .005)$$

CDMSE has a much more positive relationship to SES for freshmen than seniors.

$$(z = 2.89, p = .007)$$

CES and BFI have a more positive relationship to career maturity for freshmen than seniors.

$$(z = 9.43, p < .001 \text{ and } z = 5.36, p < .001).$$

The relationship between CDMSE and career maturity is more positive in seniors than freshmen.

$$(z = -4.265, p < .001)$$

11. What is the statistical difference in race classification on researcher questions 1-7?

To answer this question, we compared results of Blacks to Whites and Hispanics to Whites.

Table 18
Model Applied to White Students

			Estimate	S.E.	C.R.	P	Label
SES_Number	<---	CES_R	.012	.126	.096	.923	.007
SES_Number	<---	BFI	-.404	.260	-1.556	.120	-.107
SES_Number	<---	CDMSE_SF	.040	.137	.295	.768	.022
CareerMaturity	<---	SES_Number	-.005	.007	-.789	.430	-.044
CareerMaturity	<---	CES_R	.018	.014	1.283	.199	.087
CareerMaturity	<---	BFI	-.020	.028	-.726	.468	-.046
CareerMaturity	<---	CDMSE_SF	.076	.015	5.150	<.001	.356

Table 19
Model Applied to Black Students

			Estimate	S.E.	C.R.	P	Label
SES_Number	<---	CES_R	-.038	.248	-.151	.880	-.020
SES_Number	<---	BFI	-.488	.425	-1.148	.251	-.146
SES_Number	<---	CDMSE_SF	.370	.280	1.319	.187	.191
CareerMaturity	<---	SES_Number	.008	.012	.671	.502	.065
CareerMaturity	<---	CES_R	-.044	.027	-1.604	.109	-.188
CareerMaturity	<---	BFI	.080	.047	1.698	.090	.196
CareerMaturity	<---	CDMSE_SF	.093	.031	2.990	.003	.394

Table 20
Model Applied to Hispanic Students

			Estimate	S.E.	C.R.	P	Label
SES_Number	<---	CES_R	-.156	.214	-.727	.467	-.075
SES_Number	<---	BFI	-.548	.475	-1.155	.248	-.123
SES_Number	<---	CDMSE_SF	.412	.251	1.639	.101	.185
CareerMaturity	<---	SES_Number	.003	.008	.310	.756	.028
CareerMaturity	<---	CES_R	-.018	.019	-.929	.353	-.092
CareerMaturity	<---	BFI	-.029	.042	-.687	.492	-.071
CareerMaturity	<---	CDMSE_SF	.071	.022	3.194	.001	.352

Table 21
White and Black Students Compared

			White Students		Black Students			
			b1	SE1	b2	SE2	z	p
SES_Number	<--	CES_R	0.012	0.126	-0.038	0.248	2.578	0.014
SES_Number	<--	BFI	-0.404	0.26	-0.488	0.425	0.222	0.389
SES_Number	<--	CDMSE_SF	0.04	0.137	0.37	0.28	-1.681	0.097
CareerMaturity	<--	SES_Number	-0.005	0.007	0.008	0.012	-13.387	<.001
CareerMaturity	<--	CES_R	0.018	0.014	-0.044	0.027	8.226	<.001
CareerMaturity	<--	BFI	-0.02	0.028	0.08	0.047	-5.661	<.001
CareerMaturity	<--	CDMSE_SF	0.076	0.015	0.093	0.031	-0.903	0.265

SES has a much more positive relationship to CES for White Students than Black Students.

$$(z = 2.57, p = .014)$$

Career maturity has a more positive relationship to CES for White Students to Black Students.

$$(z = 8.22, p = .001).$$

BFI to career maturity is the opposite with Black students having a more positive

relationship to personality types than White students.

$$(z = -5.66, p = .001)$$

SES to career maturity shows that Black Students have a more positive

relationship to SES than White students.

$$(z = -13.38, p = .001)$$

Table 22
White and Hispanic Students Compared

			White Students		Hispanic Students			
			b1	SE1	b2	SE2	z	p
SES_Number	<--	CES_R	0.012	0.126	-0.156	0.214	2.324	0.027
SES_Number	<--	BFI	-0.404	0.26	-0.548	0.475	0.335	0.377
SES_Number	<--	CDMSE_SF	0.04	0.137	0.412	0.251	-1.798	0.079
CareerMaturity	<--	SES_Number	-0.005	0.007	0.003	0.008	-16.097	<.001
CareerMaturity	<--	CES_R	0.018	0.014	-0.018	0.019	11.010	<.001
CareerMaturity	<--	BFI	-0.02	0.028	-0.029	0.042	1.320	0.167
CareerMaturity	<--	CDMSE_SF	0.076	0.015	0.071	0.022	0.356	0.374

The results show that White students have a more positive relationship from SES

to CES than Hispanic students.

$$(z = 2.32, p = .027)$$

The results also show that White students have a more positive relationship from

career maturity to CES than Hispanic students.

$$(z = -16.09, p = .001).$$

However, SES to career maturity has a more positive relationship for Hispanic

students when compared to Whites students.

$$(z = 11.01, p = .001$$

Overall Analysis

The overall sampled population showed that CDMSE has a statistically significant relationship to career maturity and that SES mediates the relationship between CDMSE and career maturity. The overall model also explained 13% of the variance in the variable outcome, career maturity. The diagram below shows the path model used in the study with the path coefficients for all the participants.
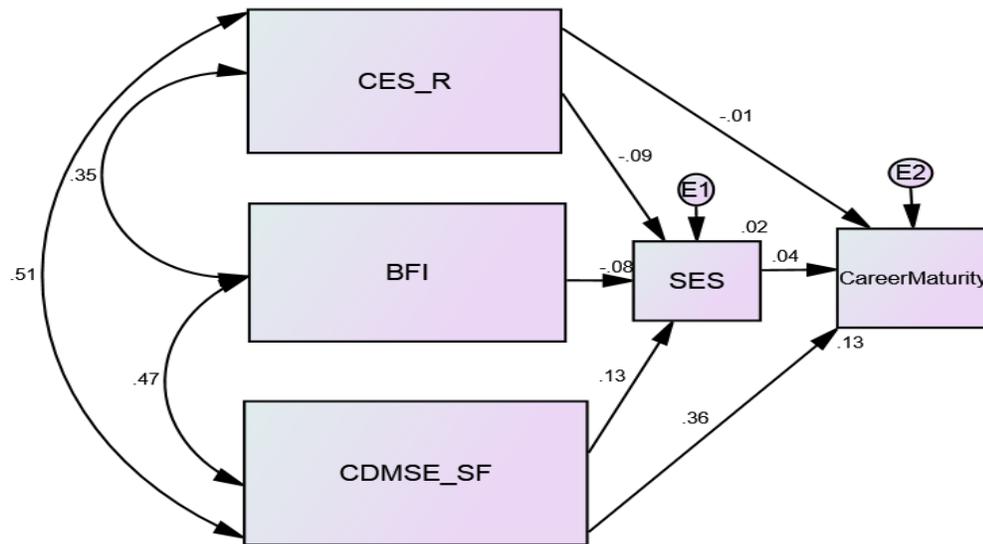

Figure 4. Illustration of Path Model and Coefficients.

Athletes and Non-Athletes

Non-Athletes were the same as the sampled population but for athletes the relationship between CDMSE and SES showed significance against career maturity. Also, SES was a significant mediator for athletes. From the *z*-score data CDMSE is a stronger predictor for career maturity for non-athletes. However, SES, career exploration and personality types are strong predictors of career maturity for athletes. Also, from the *z*-score data of gender, SES is a stronger predictor of CDMSE for female athletes than male athletes. Personality type is a stronger predictor of career maturity for female athletes than male athletes.

Academic Classification

From the *z*-score data, SES has a more positive relationship to CES for seniors than freshmen and CDMSE has a much more positive relationship to SES for freshmen than seniors. CES and BFI also have a more positive relationship to career maturity for freshmen than seniors. However, the relationship between CDMSE and career maturity is more positive in seniors than freshmen.

Race

From the *z*-score data when compared to Black students, White students have a more positive relationship to CES and career maturity than Black students. However, BFI to career maturity and SES to career maturity shows Black students have more of a positive relationship than White students.

When compared to Hispanic students, White students have a more positive relationship to CES and career maturity than Hispanics. However SES has a positive relationship to career maturity for Hispanics versus Whites.

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V. DISCUSSION AND CONCLUSIONS

Introduction

Student athletes are a population within universities that will continue to capture attention in literature, media, and among university personnel. Understanding the college student athletes, will help to better relate to their personal struggles as well as their successes. Due to the demands of athletics and ever increasing expectations, it is important for athletes to establish routines that will help with their time management. Being able to balance all the different hats that a student athlete has to wear, can make all the difference in their college success.

This examination originated as the starting point of dialogue about how student athletes and non- athletes navigate through college based on their chosen paths. Purposeful study of these two student subgroups has provided a way to predict areas that can create challenges for college students.

Review of Research Study

The purpose of this study was to identify factors that can impact students' preparedness for life after college. A path analysis model was established to investigate relationships between psychological variables that the participants can control upon a dichotomous endogenous outcome such as career maturity. A social mediator variable was put in place to see if it would have an impact on the psychological variables. The theoretical framework was grounded in critical realism as a way to investigate mechanisms, not events, in an open world by constructing bodies of knowledge that have substantial impact on the long term best interests of each individual participant.

Data analyses included comparing the entire sample to the model as well as different comparisons between sub-groups based on gender, academic classification, race, student-athletes, and non- athletes. The data were collected from students at a central Texas university during the spring, 2015 semester. Athletes were surveyed before practice, after practice, during study hall, or through an online option. The non- athletes were surveyed during their scheduled classes, and were given an online option. Each of the sample sizes provided adequate numbers to proceed with a path analysis in order to determine relationships. The analytic results included, descriptive statistics, path coefficients, and directional hypothesis testing with z-testing and explained variances.

The background of the participants included age, gender, ethnicity, academic classification, major, and a question determining if they were an athlete or not. Each of these questions provided an open space so participants could provide full, personal answers. Additionally, there were SES specific questions in order to gather a general idea about each participant's level of SES. These questions included the zip code where participant grew up, whether or not they were on reduced lunch, and mother's and father's education level, all factors recognized as playing a part in SES classifications.

The sampled demographics showed 33% more females than male participants. There were also 25% more non-athletes than athletes included in the study. Each academic classification group had at least 100 participants with no more than 140 in each of the four groups.

Review of Literature Findings

The literature on student athletes provides a unique perspective on the impact of sports participation. Athletic culture focuses on the type of environment that athletes are

in and the expectations that are placed on them to excel in both academics and athletics. Coaching staff, fans, sponsors and campus experiences are different elements of the athletic culture. Similar to athletic culture, athletic identity focuses on the degree to which an individual identifies with his/her athletic role and environment (Lavallee, Gordon, & Grove 1997). With this identity come social and psychological impacts for individuals, and concerns about how they would be perceived by their peers. Athletic culture and athletic identity are two separate topics, but most people who identity as athletes would also be aware, or be a part, of the athletic culture that is described.

Role conflict appears in a lot of athletic literature because it is big part of being an athlete in college. Because of the extra time that is devoted to athletics, regardless of the sport, each individual has to find a way to uphold his/her academic expectations. The literature highlights how role conflicts can be managed by athletes and how they can impact their relationships outside of their athletic counterparts.

Another conversation in the literature concerns how faculty perceptions impact athletes' academic performance. Faculty can provide tremendous support for student-athletes. Because of the number of classes that are missed student-athletes can be put in situations where they feel like their back is against the wall, or feel as though no one understands what they are going through. In those moments having the support of their professors can provide student-athletes with a positive relationship that can help them feel more confident (Bell, 2009; Williams, Colles & Allen, 2010). Race can also impact faculty perceptions (Comeaux, 2010; Comeaux, 2011). Faculty feeling disconnected from the athletic department and faculty having to take time away from time commitments for their work, were some of the faculty perceptions addressed in the literature.

Current athletic literature focuses on social media in athletics, gender in sports, and paying or not paying athletes. Each of these topics has its own significance, and they are the most current topics in college athletic literature. With the growth and awareness of social media, college athletic programs, and the NCAA are trying to find ways to limit how many times and what athletes can share. Gender in sports is gaining some attention as of late because more women in college programs are starting to gain attention based on their athletic success. Another current topic of debate is the difference between how men and women view being athletes and what they would like to take away from their experiences (Daltry & Chester, 2013; Harrison & Lynch, 2005; Kilpatrick, Hebert, & Bartholomew, 2005; Warner & Dixon, 2015) as well equality in regard to attention and money spent on men and women (Diacin & Lim, 2012; Mahony, Riemer, Breeding & Hums, 2006). Paying or not paying college athletes is a topic that has started to gain more attention because of all the money and contracts that are coming from college sports (McCormick & McCormick, 2010; Weaver, 2011). However, there is also literature that focuses on why these student athletes should *not* get paid for their participation (Osborne, 2014; Harrison & Bukstein, 2014; Sanderson & Siegfried, 2015).

Rounding out the literature are scandals that impact student athletes, including questions about grades, recruiting violations, or other theories that are often written about in athletics and college athletes in transition. Scandals in student athletics create a bad image for college athletic programs, thus leading to stereotypes. Self-determination theory (SDT) and social identity theory (SIT) are two theories that receive a lot of attention because they concentrate on motivation for the gratification, or individuals making sense of their world by identifying in a world they feel is important, respectively.

Each of these theories has an impact on student-athletes and their environments. College athletes in transition is an area where the literature still needs to be developed because there are not many current pieces of literature that research and discuss this transition. However, athletes eventually run out of eligibility to play their sport or worse, they suffer an injury that keeps them from playing their sport again. This transition can present one of the biggest challenges that an athlete can face because he/she must step into a world that is unknown and that can create added pressure.

This literature helps provide information that can help the awareness of student-athlete's educational paths. Not all student athletes have the same path but being aware of the possibilities can help create some understanding. Social support can go a long way toward helping student-athletes stay on track, regardless of who is giving that support.

Discussion of Results

The discussion of results provides an overview of the demographic information as well as a detailed explanation of key findings from the model. There were a total of 502 college students that were in this sample. Of those, 216 were student athletes and 286 were non-student athletes. The total population group showed CDMSE as a statistically significant relationship with career maturity and that SES mediates the relationship between CDMSE and career maturity. As students start to feel more confident about making decisions for themselves their career maturity tends to increase. This agrees with past research that revealed that career decision making self-efficacy has an impact on career maturity (Houle & Kluck, 2015; Kornspan & Etzel, 2001). Since college is considered a time of change and development (Houle & Kluck, 2015), especially for young adults in the 18-24 age group, this result tends to be in line with student maturation

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The other two variables included in the model did not show a significant relationship to career maturity, and the full model only explained 13% of the total variance in the outcome of career maturity. While the model cannot be used for predictive purposes for the general population, it is useful in that it allows us to compare groups. Which can help determine how different groups fair on various variables.

When comparing athletes to non-athletes different results emerged. CDSME was a stronger predictor for career maturity for non-athletes. However, status as a student athlete showed to be strong predictors of SES, career exploration and personality types of career maturity. These findings suggest that the time constraints for athletes have an impact on their overall career maturity. Having the time to explore career options and to fully engage in that aspect of their lives can be hard. As noted previously, the amount of time athletes have to spend on activities other than sport is limited due to practice, travel, working out, and other factors that come with athletics.

Although not a statistically significant difference, athletes scored slightly lower (3.72) on personality openness compared to non-athletes (3.81). Openness is the personality trait that deals with seeking new experiences and intellectual pursuits. That is not to say athletes do not want to purse new experiences, but it is clear they have a lot of factors that could limit their time to try and seek these experiences. For athletes, SES mediates the relationship between career maturity, so as SES goes up for athletes, so does their career maturity. This finding focuses on the notion that student- athletes who come from wealthier backgrounds are able to develop a stronger career maturity.

For all the differences that are made between male and female athletes, this study indicated that male and female athletes do not show as much of a statistical variation as

other categories used in this study. SES is a stronger predictor for SES for female athletes, perhaps similar to the reason for athletes in the previous group (the wealthier environment females athletes come from the better chance they will develop a stronger career maturity). Personality type was another stronger predictor for female athletes. When looking at the results of female athletes, they scored higher than male athletes on agreeableness 4.21 and neuroticism 3.04. Males scored 3.96 and 2.51 respectively. Agreeableness is a reflection of an individual adjusting his/her behavior to suit others, and neuroticism is an emotional personality trait.

Academic classification comparisons were made between freshmen and seniors since they are at opposite ends of their college experiences. This comparison produced the greatest statistical significances among the compared groups. Let's start with the positive relationships that seniors have versus freshmen. The results indicated seniors have more positive relationships from CES to SES, SES to career maturity and CDMSE to career maturity than freshmen. Seniors have had more time in college, they have taken more classes, and they are close to entering a different phase in their lives. The fact that career exploration goes up as SES goes up is an indication that those seniors, coming from higher SES backgrounds, are able to explore more when it comes to careers. This could be because of their SES position and coming from a background where being in a higher SES class impacts someone decisions to begin exploring different career options. SES also impacts career maturity, just like in the previous two comparisons, which can be an indication of the SES background of the senior. CDMSE, having more of positive relationship in seniors is an indication that seniors are more in tuned with who they are

and feel like they are capable in their behaviors, that they can take the right steps to successfully completing a task.

Interestingly enough, freshmen have positive relationships with CDMSE to SES, CES to career maturity and personality to career maturity compared to seniors. The relationship of CDMSE to SES remains consistent in this comparison just as it has in the others. Freshmen have a stronger relationship with CES compared to seniors. This could be because freshmen are in a new environment and they are more open to different ideas on their journey than seniors. Also, freshmen are faced with so many life challenges, deciding on a career, immediately upon entering college is not an easy decision (Morgan & Ness, 2003).Due to the fact that seniors are close to graduating from college, the time they spend focused on exploring career options is significantly less than freshmen. Since freshman are just starting their college, career exploration becomes more important for them to be able to develop their career maturity.

To understand the significance of the relationship of personality type to career maturity, the results of these participants on their personality test were pulled to indicate which personality areas freshmen were higher or lower than seniors. The highest personality trait for freshmen compared to seniors was extroversion (freshmen = 3.50, seniors = 3.30) which is the personality trait that seeks fulfillment from sources outside of the individual or in a community. The lowest for freshmen was neuroticism which is the personality trait of being emotional (freshmen = 2.88, seniors = 3.01). Looking at these different averages BFI suggests that freshmen are looking for fulfilment, and that could play a role into having a more positive relationship to career maturity than seniors. Since

freshmen are lower on the emotional personality they are able to search for ways to develop their career maturity through different environments and experiences.

The race comparison groups were Black students to White students and Hispanic students to White students. When compared to Black students, White students have positive relationships to CES and career maturity, which may indicate White Students use career exploration as a way to develop career maturity. However, BFI to career maturity and SES to career maturity shows Black students have more of a positive relationship between these variables than White students. Black students were lower in neuroticism (2.78 and 2.90) and conscientiousness (4.11, 4.23) but higher on openness (3.87 and 3.75) and extraversion (3.51 and 3.44) compared to White students. Similarly, in the Freshman and Senior comparison, Black students are open to seeking new experiences and gaining fulfillment from outside sources and these two factors can lead to the more positive relationship with career maturity based on personality. When Black students are in higher SES environments they are able to increase their career maturity, similar to the other comparison groups.

When Hispanics were compared to White students they showed similar results as Black students but there was not a significant difference between Hispanics and White students in regard to personality types. It is important to note that CDMSE did not show any significance when comparing races, which is the only comparison group that did not show any type of significance. In order for race to have a significant relationship, environment and experiences play a greater role.

The main findings of this study were: a) the statistical impact that career decision making self -efficacy has on athletes career maturity, b) the statistical impact of different

variables on the career maturity of Freshman as opposed to Seniors, c) how and when SES mediates career maturity, and d) personality being more of a predictor for female athletes and Black students compared to male athletes and White students for career maturity respectively. The model shows that student athletes need to have stronger support in developing career decision making self -efficacy in order to gain career maturity. Student athletes can benefit from having this support early in their college careers. For freshmen, career exploration is an important piece of their career maturity development. However, seniors need to have more career decision making self -efficacy in order to have more career maturity. SES is also important for students and student athletes because it shows that students who are in a lower socioeconomic class, could benefit from additional support in order to gain career maturity. Some students with lower SES use college athletics to gain access to college, so there is even more need to add support for college exploration.

The analysis originated to identify factors that can impact students' preparedness for life after college. Drawing from the results of this path analysis model on career decision making self -efficacy is a variable that predicts career maturity. Embracing student athletes and providing them opportunities, outside of their sport, to develop the confidence and behaviors to have a higher career decision making self-efficacy is what will help increase student-athletes' career maturity. Creating a platform for professional development for anyone working with student athletes, can help to foster a supportive community around these athletes. Traditionally, student athletes are a demographic of students who are seen as having everything figured out and as being extremely confident. However, this study shows that student-athletes are not confident enough to have high

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career maturity which can have a negative impact on their future. Being able to implement a way to transform the student athletes experience to include an effective plan and new learning opportunities to advance their athletic experience would help impact their career maturity.

Limits of the Study

For the purpose of this study, the following limitations are identified:

1. Students self-reported, and may not have responded reliably to confusing statements.

2. Only students from one university who were present at the time of the meetings were surveyed.

3. Students might have felt obligated to respond with socially desirable responses.

4. Only 37% of football players were surveyed

5. I was not allowed to go into all classrooms, due to time constraints, to conduct surveys, so some were taken online.

For the purpose of this study, the following delimitations are identified:

1. This study was only conducted at one school.

2. This was a point in time snapshot that was completed in the Spring semester.

Implications for Further Research

Based on the findings in this study, following are avenues for further research. Since the instruments suggest the various factors together did not impact career maturity greatly, only 13%, it is important to test other instruments to determine what does make a bigger impact on career maturity in order to provide a greater degree of help for student athletes. Also, using career decision making self-efficacy as an outcome variable versus a

predictor variable would be an alternative way to determine how much each of these variables can impact self-efficacy in hopes of finding a way to further help athletes.

Conducting a similar study from a different division I university would be important to this research. Comparing different divisions of athletic programs to others (division I to division II or division III to division II), could also provide more insight about how the differences in programs can impact students. Similarly, some other division I universities might have more sports to survey such as, lacrosse, or swimming that could also produce additional valuable insights.

A qualitative approach to studying student athletes would provide alternative methods for future research to uncover some underlying challenges for student-athletes. It could also help in uncovering differences between non-athletes and student athletes. Since college students all come from various backgrounds, they could have unique experiences that might have an impact on their career maturity.

Implications for Practice and Recommendations

The present study investigated various relationships between three different variables and a mediator variable on the impact of overall career maturity of student athletes and non-athletes. Due to the amount of attention that student athletes are gaining in literature, as well as the media, it is important to study this population in order to gain a better understanding of their environment. The practical significance of the study is that student affairs, the NCAA, and the coaching staffs should use this information in order to help develop athlete's career maturity. When student athletes enter a university as freshmen it is important to instill in them how important their future is after college and the steps that can be taken in order to achieve their professional goals.

The theoretical significance of this study is in extending the understanding of adults who are in an environment where they need to be encouraged to learn and develop professional skills. Adult education can lead the way to creating professional development for individuals who are responsible for helping student athletes with career planning. How we treat this entire group of students can impact all of us professionally, educationally, and socially. Through adult education these student athletes can become a part of a community that encompasses life span learning and development.

Promoting a student athlete's future starts with implementing programs that are in place to help them gain career maturity, as well as opening doors for various opportunities. Providing athletes with workshops taught by people who work in industry, having networking events with organizations, athletic sponsored internships, and career preparedness courses are just a few ways that athletes can gain more from their college experience by being able to focus on their careers after college. Each sport has an offseason where time can be dedicated to supporting these student athletes do something other than represent their school.

Another way to help athletic programs implement helpful avenues for student athletes is by implementing a mentorship program, so these student athletes can have a mentor when they are going through this process. This can be something that is set up by the athletic department to pair former student athletes that have graduated and are currently working in an environment outside of athletics with current student athletes. Since the graduate would be currently working outside the sports domain and should be able to provide valuable knowledge. This would also give younger students a chance to watch how graduates prepared themselves for their future. Since athletes are used to

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being accountable to their teammates and performing for each other, this could be another way to use their skills they develop from sports to carry over into a mutually beneficial result. This would also provide them the experience of being a mentor, gaining the experience of what that is like, and how it can be helpful in other situations.

The culture of athletics should maintain their competitive edge but they should also focus on the long term goals of their student-athletes. Large companies are successful at being competitive while also giving their people opportunities for growth and development. Athletic programs should join the movement of preparing each of their student athletes for these opportunities as individuals. By building partnerships outside the athletic departments, athletes, coaches, universities, the NCAA, and other organizations could all benefit from being a part of a successful movement.

The reality of a student athlete is the classroom will never produce the applause he or she experiences being introduced before a game, making a big play, or even more exciting, doing something that wins the game. Those kinds of things cause the student body to respond by jumping out of their seats and rushing down to celebrate. Another prominent aspect of being a student athlete is having thousands of students sway back and forth to a school song that they are fortunate to be representing. Each of these examples are different types of attention that student athletes get. However, these experiences are not going to help these athletes develop their career maturity. Athletic departments need to be just as worried about their players as they are their product, because the players are the ones who will suffer if athletic departments do not give students every chance they can to be successful once their sport is over.

Summary and Conclusion

Even though career decision making self-efficacy was the most consistently significant relationship to career maturity, it is important for athletic departments to understand more about self-efficacy and how they can use that for the betterment of their student athletes. This study provided a foundation for how participating in sports can play a role in impacting a student's overall career maturity. The results confirmed that student athletes have a harder time obtaining career maturity. College athletics can define a student's experience based off a big game, athletic recognition or an athletic event that takes place that brings a lot of attention to the university. However, it is important that more attention be paid towards a student's holistic experience and not just the sports product.

APPENDIX SECTION

APPENDIX A

<u>CONSENT TO PARTICIPATE</u>

Career Preparation: A Comparison of University Athletes to Non-Athletes

As a college student, you are invited to participate in a research study. The purpose of this study is to determine a) if career exploration, personality type, and career decision self-efficacy, either individually or in combination, contribute to the prediction of career maturity levels among athletes and non-athletes, b) if gender and/or academic classification contributes to the prediction of career maturity, and c) if socioeconomic status has a mediating impact on career maturity.

INFORMATION

The number of participants that will be participating in the study is at least 300 students and student athletes at the University. Participation will be limited to a one-time response to a questionnaire that will take approximately 15 - 20 minutes to complete with paper and 5-12 minutes online. Hopefully the data collected will give a clearer picture of the career maturity levels of college students and student athletes when compared to one another. College students and student athletes are not often compared and it is hoped that this research can provide information for the University and athletic departments that can be used to positively impact the experience of all college students.

CONFIDENTIALITY

The anonymity of the respondents will be secure since no names will appear on the questionnaires. Data will be stored securely and will be made available only to the person conducting the study and her doctoral committee members unless a participant specifically gives permission in writing to do otherwise. No reference will be made in oral or written reports that could link any participants to the study. Questionnaires will be destroyed after a period of one year from completion of the research study.

CONTACT

If you have questions at any time about the study or procedures, you may contact the researcher, TaNeisha Page at Tp1102@txstate.edu. If you have any questions about your rights as a participant, contact the Research Compliance Services section of the Office of Research at (512) 245 - 2314.

PARTICIPATION AND INFORMED CONSENT

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty. If you withdraw from the study before data collection is completed your data will be destroyed. The return of the completed questionnaire constitutes consent to participate.

Demographic Information

1. **Age:**

   _____

2. **Gender:**

   M _____ F _____

3. **Academic Classification:**

   Freshman _____ Sophomore _____ Junior _____ Senior _____

4. **Are you on a intercollegiate sports team at the University:**

   College Athlete _____   Non-Athlete _____

5. **If you are an on an intercollegiate sports team, which sport do you participate in:**

   _____

6. **What is your major or intended major:**

   _____

7. **What ethnicity/race demographic do you self-identify with:**

   _____

Career Exploration Survey – Revised (CES-R)

Instructions: For each statement below please read carefully and indicate the amount of effort that you have made to accomplish each of these tasks by circling the correct number on the answer sheet.

1 = Never
2 = Somewhat
3 = A Moderate Amount
4 = A Substantial Amount
5 = A Great Deal

Example: **To what extent have you behaved in the following ways over the last 3 months**:

      A. *Researched various cooking recipes.*

If your response was "*A Moderate Amount*," you would circle the 3 for "*A Moderate Amount*" on the answer sheet.

Career Exploration Survey – Revised	Scale				
To what extent have you behaved in the following ways over the last 3 months?					
1. Experimented with different career activities.	1	2	3	4	5
2. Sought opportunities to demonstrate skills.	1	2	3	4	5
3. Tried specific work roles just to see if I liked them.	1	2	3	4	5
4. Investigated career possibilities.	1	2	3	4	5
5. Went to various career orientation programs.	1	2	3	4	5
6. Obtained information on specific jobs or companies.	1	2	3	4	5
7. Gathered information on job trends, salaries, and general job opportunities in my career area.	1	2	3	4	5
8. Sought information on specific areas of career interest.	1	2	3	4	5
To what extent have you done the following in the past 3 Months?					
9. Reflected on how my past integrates with my future career.	1	2	3	4	5

10.	Focused on my thoughts on me as a person in relation to my career.	1	2	3	4	5
11.	Contemplated my past in relation to my career.	1	2	3	4	5
12.	Been retrospective in thinking about my career.	1	2	3	4	5
13.	Understood a new relevance of past behavior for my future career.	1	2	3	4	5
14.	Participated in an internship, practicum, fieldwork, or volunteer opportunities in a career field I am interested in.	1	2	3	4	5
15.	Participated in practice interviews.	1	2	3	4	5
16.	Sought career advice from a teacher or Academic Advisor.	1	2	3	4	5
17.	Been to the Career Resource Center on campus to obtain career guidance and/or explore your career options.	1	2	3	4	5
18.	Done online searches to obtain career information.	1	2	3	4	5
19.	Sent out resumes to employers and/or posted them online.	1	2	3	4	5
20.	Attended job fairs or interviewed with employers on campus.	1	2	3	4	5
21.	Written and/or sent letters of inquiry, or telephones potential employers to make employment contacts.	1	2	3	4	5
22.	Spoke to family, friends, or community about career advice.	1	2	3	4	5
23.	Gathered information regarding additional education or training needed for your career.	1	2	3	4	5
24.	Taken coursework related to a career you are interested in.	1	2	3	4	5
25.	Too career test to analyze and assess your interest, abilities and/or values.	1	2	3	4	5
26.	Thought about what career would be best for me.	1	2	3	4	5
27.	Thought about how my major fits with my career goals.	1	2	3	4	5
28.	Established career plans for the future.	1	2	3	4	5

_____

The Big Five Inventory (BFI)

Instructions: Here a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who lies to spend time with others? Please circle a number next to each statement to indicate the extent to which you agree or disagree with that statement.

1 = Disagree Strongly
2 = Disagree a Little
3 = Neither agree nor Disagree
4 = Agree a Little
5 = Agree Strongly

I SEE MYSELF AS SOMEONE WHO:

Survey Item	Scale				
1. Is talkative	1	2	3	4	5
2. Does a thorough job	1	2	3	4	5
3. Is depressed, blue	1	2	3	4	5
4. Is original, comes up with new ideas	1	2	3	4	5
5. Is helpful and unselfish with others	1	2	3	4	5
6. Is relaxed, handles stress well	1	2	3	4	5
7. Is curious about many different things	1	2	3	4	5
8. Is full of energy	1	2	3	4	5
9. Is a reliable worker	1	2	3	4	5
10. Can be tense	1	2	3	4	5
11. Is ingenious, a deep thinker	1	2	3	4	5
12. Generates a lot of enthusiasm	1	2	3	4	5
13. Has a forgiving nature	1	2	3	4	5
14. Worries a lot	1	2	3	4	5
15. Is emotionally stable, not easily upset	1	2	3	4	5
16. Is inventive	1	2	3	4	5

17. Perseveres until the task is finished	1	2	3	4	5
18. Can be moody	1	2	3	4	5
19. Is sometimes shy, inhibited	1	2	3	4	5
20. Is considerate and kind to almost everyone	1	2	3	4	5
21. Does things efficiently	1	2	3	4	5
22. Is outgoing, sociable	1	2	3	4	5
23. Makes plans and follows through with them	1	2	3	4	5
24. Gets nervous easily	1	2	3	4	5
25. Likes to reflect, play with ideas	1	2	3	4	5
26. Has an active imagination	1	2	3	4	5
27. Tends to be quiet	1	2	3	4	5
28. Is generally trusting	1	2	3	4	5
29. Likes to cooperate with others	1	2	3	4	5

_____
Career Decision Making Self-Efficacy Scale-Short Form

Instructions: For each statement below please read carefully and indicate how much confidence you have that you could accomplish each of these tasks by circling the correct number on the answer sheet.

1 = No Confidence at all
2 = Very Little Confidence
3 = Moderate Confidence
4 = Much Confidence
5 = Complete Confidence

Example: How much confidence do you have that you could:
    A. *Summarize the skills you have developed in the jobs you have held*?

If your response was "*Moderate Confidence*," you would circle the **3** for "*Moderate Confidence*" on the answer sheet.

HOW MUCH CONFIDENCE DO YOU HAVE THAT YOU COULD:

Survey Item	Scale				
1. Find information in the library about occupations you are interested in.	1	2	3	4	5
2. Select one major from a list of potential majors you are considering.	1	2	3	4	5
3. Make a plan of your goals for the next five years.	1	2	3	4	5
4. Determine the steps to take if you are having academic trouble with an aspect of your chosen major.	1	2	3	4	5
5. Accurately assess your abilities.	1	2	3	4	5
6. Select one occupation from a list of potential occupations you are considering.	1	2	3	4	5
7. Determine the steps you need to take to successfully complete your chosen major.	1	2	3	4	5
8. Persistently work at your major or career goal even when you get frustrated.	1	2	3	4	5
9. Determine what your ideal job would be.	1	2	3	4	5

10. Find out the employment trends for an occupation over the next 10 years.	1	2	3	4	5
11. Choose a career that will fit your lifestyle.	1	2	3	4	5
12. Prepare a good resume.	1	2	3	4	5
13. Change majors if you do not like your first choice.	1	2	3	4	5
14. Decide what you value most in an occupation.	1	2	3	4	5
15. Find out about the average yearly earnings of people in an occupation.	1	2	3	4	5
16. Make a career decision and then not worry whether it was right or wrong.	1	2	3	4	5
17. Change occupations if you are not satisfied with the one you enter.	1	2	3	4	5
18. Figure out what you are and are not ready to sacrifice to achieve your career goals	1	2	3	4	5
19. Talk with a person already employed in a field you are interested in.	1	2	3	4	5
20. Choose a major or career that will fit your interests.	1	2	3	4	5
21. Identify employers, firms, and institutions relevant to your career possibilities.	1	2	3	4	5
22. Define the type of lifestyle you would like to live.	1	2	3	4	5
23. Find information about graduate or professional schools.	1	2	3	4	5
24. Successfully manage the job interview process.	1	2	3	4	5
25. Identify some reasonable major or career alternatives if you are unable to get your first choice.	1	2	3	4	5

Socioeconomic Status Information

What is the zip code where you grew up?

_____

Were you on reduced lunch in grade school?

Yes _____ No _____

Highest Level of Education for your Father:

Some High School _____

High School Diploma _____

Some College _____

Undergraduate Degree _____

Graduate Degree _____

Other _____

Highest Level of Education for your Mother:

Some High School _____

High School Diploma _____

Some College _____

Undergraduate Degree _____

Graduate Degree _____

Other _____

Career Maturity Inventory – Attitude Scale

Read each statement and circle for whether you Agree "A" or Disagree "D" with the statement provided.

Career Maturity Inventory – Attitude Scale	AGREE	DISAGREE
29. Everyone seems to tell me something different; as a result I don't know what kind of work to choose.	A	D
30. It's probably just as easy to be successful in one occupation as it is in another.	A	D
31. I have little or no idea what working will be like.	A	D
32. Once you chose a job, you can't choose another one.	A	D
33. 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
34. Sometimes you have to take a job that is not your first choice.	A	D
35. Work is dull and unpleasant.	A	D
36. I can't understand how some people can be so certain about what they want to do.	A	D
37. As far as choosing an occupation is concerned, something will come along sooner or later.	A	D
38. Choosing an occupation is something you have to do on your own.	A	D
39. As long as I remember, I've known what kind of work I want to do.	A	D
40. There may not be any openings for the job I want most.	A	D
41. I don't know how to go about getting into the kind of work I want to do	A	D

42.	There is no point in deciding upon a job when the future is so uncertain.	A	D
43.	I spend a lot of time wishing I could do work I know I can never do.	A	D
44.	If someone would tell me which occupation to enter, I would feel much better.	A	D
45.	I know very little about the requirements of the job.	A	D
46.	When choosing an occupation, you should consider several different ones.	A	D
47.	There is only one occupation for each person.	A	D
48.	The best thing to do is to try out several jobs, and then choose the one you like best.	A	D
49.	You get into an occupation mostly by chance.	A	D
50.	I seldom think about the job I want to enter.	A	D
51.	You almost always have to settle for a job that's less than you had hoped for.	A	D
52.	I really can't find any work that has much appeal to me.	A	D
53.	I'd rather work than play.	A	D

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