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Academic and Athletic Motivation of Collegiate Athletes and their Career Transition Plans: A Mixed -Method Approach

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B.S., Ocean Physical Education, Korea Maritime and Ocean University, 2011
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DISSERTATION

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DEDICATION

This dissertation is dedicated to my family, especially my wife, Hyemin Park. I could not complete this long journey without my wife. I cannot express how much I love you and thank you for your sacrifices for our family. Throughout this process, she always gave me encouragement and unconditional support. I am just too fortunate to have her as my wife. I am very excited to live with you for the rest of my life and will live for you and my family. I love you so much.

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Abstract

The purpose of this study is to understand NCAA Division I, II, and III collegiate athletes (CAs)' motivations towards academics, athletics, and gain a greater understanding of their transition plans. This study uses a sequential mixed method design. Firstly, the quantitative study examined collegiate athletes' motivation levels for both academics and athletics among the NCAA divisions. The Sport Motivation Scale-II (SMS-II) was utilized to measure athletic motivation, and the Academic Motivation Scale (AMS) was used to measure academic motivation. After conducting quantitative research, a qualitative approach was used to explore collegiate athletes' career readiness and transition plans based on their motivation levels. A total of 457 CAs participated in the quantitative part, and 13 participants were recruited and participated in the qualitative part of the study.

The quantitative part showed significant differences between Division I and Division III and Division II and Division III for academic motivation. Also, the results revealed significant differences between Division I and Division II and Division I and Divisions III in terms of athletic motivation. The qualitative part resulted in five distinct themes: *1) Divisional Differences in Support & Resources, 2) Balancing the Dual Role of Athletics and Academics,*

3) Self Determination Theory: Emphasis on the Components of Motivation, 4) Planning and Career Goals for Transition Out of Sport, and 5) Impact of COVID-19.

The results of this study included vital information regarding CAs' motivation and their career transitions. Since all the athletes will eventually retire from their sports, they will experience at least one or more transitional situations in their athletic lives. Thus, it is hoped that this study will provide important information for people who are involved in college athletics, specifically, educators, coaches, administrators, and researchers, as well as fill a gap in the literature, as few studies have been conducted using DII and DIII CA populations, as well as there is a lack of research comparing all three NCAA divisions.

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CHAPTER I: INTRODUCTION

Understanding the life of collegiate athletes (CAs) has been an important topic of research for the past several decades (Brewer et al., 1993; Lally, 2007; Smith & Hardin, 2018, 2020; Stokowski et al., 2019). According to National Collegiate Athletic Association (NCAA), more than 460,000 CAs compete in 24 NCAA-sanctioned sports every year (NCAA, 2018). CAs are considered a special population whose university experience is different from their non-athlete peers within educational institutions because of their lifestyle, roles, and special needs (Comeaux, 2010; Ferrante et al., 1996; Hyatt, 2003; Papanikolaou et al., 2003; Pate et al. 2011; Valentine & Taub, 1999; Watson, 2006). Most CAs are recruited to participate in competitive sports sponsored by their institution. At the same time, they are full-time students who are supposed to perform their academic responsibilities at the same institutions successfully. Even though CAs receive benefits (i.e., scholarships, gear, meals, etc.), they are required to spend tremendous amounts of time in their academic and athletic roles to be successful in their collegiate athletic life.

According to the NCAA, CAs are only allowed to participate in athletically related activities for 20 hours per week, four hours a day in season, and 8 hours per week during off season (NCAA, 2020c). However, research has indicated that NCAA Division I level CAs spend about 40 hours per week participating in sport-related activities including training, recovery, and team meetings (Smith & Hardin, 2018). Given these circumstances, being a CA has a multitude of stressors and pressures, such as scheduling classes, fatigue, financial pressure, and inflexibility of coaches (Cosh & Tully, 2015; Hwang & Choi, 2016). The time demands for CAs are extensive, and this may be even more extensive during their competitive

playing seasons as they may miss numerous classes due to matches/games, travel, recovery, and extra training (Ayers et al. 2012; Cosh & Tully, 2015). Miller and Kerr (2003) conducted a qualitative study with eight Canadian CAs, and the results indicated that CAs can face greater unbalanced schedules during their athletic season because it requires a greater time commitment to athletics.

The intense time demand and additional stressors listed above for CAs can cause challenges performing successfully in their academic role. Furthermore, previous research has found their status as an athlete in the classroom can be accompanied with negative stereotypes and identities that impact academic performance (Simons et al., 2007; Yopyk & Prentice, 2005). Research has also found that CAs' academic performance can be affected by other factors such as demographics including gender, ethnicity, type of sports they play, and structure of the collegiate athletic program (Kidd et al., 2018; Reynolds et al., 2012). For instance, big conference institutions focus on winning and revenue generation from athletic programs, and this causes challenges for the lives of revenue generating CAs including transitioning out of sport and lifestyle issues (Kidd et al., 2018).

In general, universities expect CAs to perform their role primarily as a student (Lapchick, 2006). However, researchers have argued that the athletic demands for successful performance often causes them to identify more with the role of being an athlete (Miller & Kerr, 2003; Umbach et al., 2006). This can be more applicable for Division I programs and revenue-generating sports. In terms of academics, in general, female, and non-revenue sports CAs have more successful academic performances than male and revenue CAs, including football and basketball (Simons et al., 1997; 1999). Female CAs have been found to perform higher academically than their male peers because they focus on getting their degree due to

the lack of opportunities to become a professional athlete after their collegiate career (Reynolds et al., 2012). In addition, research found that African American CAs place less emphasis on academics, and education than white CAs (Beamon & Bell, 2006).

Other important issues regarding CAs' academics are academic clustering and selecting their academic major. In other words, CAs may not take courses they truly desire and select classes based on others' suggestions or recommendations (e.g., coaches and academic advisement staff; Navarro, 2014). These recommended courses are seen as easier curriculums and support the inflexibility of their athletic schedules (Schneider et al., 2010). In addition, when CAs choose their major, some CAs choose their major because it has been popular throughout their athletic program or other teammates suggested it (Schneider et al., 2010). Huml and colleagues (2014) conducted a quantitative study with 196 NCAA Division I CAs, and the results demonstrated concerns regarding the institutions' academic support system being the primary academic decision-maker for CAs (i.e., choosing majors and selecting their courses), not the athletes themselves. Due to the issues above, researchers have argued that many CAs struggle to choose and prepare for meaningful academic fields at their institutions (Fountain & Finley, 2011; Knobler, 2007), despite the various resources provided for CAs' academic and career fields (Bell, 2009; Huml et al., 2014). Navarro (2014) suggested that CAs continue to rely on athletics specific personnel and support programs throughout college to prepare for career fields stunting their ability to make autonomous decisions on their own that have a lifelong impact.

In general, NCAA Division II institutions have fewer athletic funds and offer smaller scholarships and benefits than Division I institutions. There are more than 300 colleges and universities in NCAA Division II, and their mission is to provide CAs "the opportunity to

compete at a high level of scholarship athletics while excelling in the classroom and fully engaging in the broader campus experience" (NCAA, 2020a). According to the NCAA GOALS (2016) study, all NCAA CAs have increased their time spent in athletic activities when compared to previous years (NCAA, 2016). For instance, Division II CAs spent about 32 hours per week on athletic activities in 2015 while they spent about 30 hours per week in 2010 (NCAA, 2016). Although all the three NCAA division CAs spend a higher amount of time on athletics than previously, they spent more time on academics than athletics; for instance, Division I CAs spend 38.5 hours per week on academics and 34 hours on athletics (NCAA, 2016). Division II CAs spend 38.5 hours per week on academics and 32 hours on athletics, and Division III CAs spend 40.5 hours per week on academics 28.5 hours on athletics (NCAA, 2016). Even though Division II has a greater number of institutions than Division I, there is very limited research that has been conducted to understand NCAA Division II level athletics and its challenges for CAs.

In one of the few research studies looking at Division II athletics, Nite (2012) conducted a qualitative case study with an NCAA Division II university, and the results indicated that Division II universities often experience challenges regarding support for their CAs mainly due to a lack of financial resources. Specifically, they do not have enough financial support to hire staff members to support CAs' academics (Nite, 2012). This causes coaches to be responsible for their CAs' development, while Division I institutions have specialized employees to support their CAs (Nite, 2012). Also, research has indicated that college level coaches recognize that they have a responsibility to take care of their CAs holistically; however, the nature of the coaching profession causes them to focus their efforts on athletic development over academic (Adler & Adler, 1991; Cullen et al., 1990; Nite, 2012;

Singer & Armstrong, 2001). Recently, researchers conducted a study with 44 Division II CAs assessing whether there is a relationship between athletic identity and career exploration and engagement (Bell et al., 2018). The results of this study showed that there were associations between athletic identity and career exploration and engagement among Division II CAs (Bell et al., 2018). Even though very limited studies have been conducted regarding Division II CAs, results of previously conducted studies showed similar results to the research regarding Division I.

Division III, which has more than 195,000 CAs among 446 institutions, is the largest NCAA division both in number of CAs and the number of institutions (NCAA, 2020b). Division III institutions mostly do not offer athletic scholarships and have fewer funds than Division I and II schools. Similarly, with Division II, only a few studies have been conducted on Division III CAs. Some researchers examined Division III CAs' academic performance and found that CAs had comparatively lower SAT scores than non-athletes (Bowen & Levin, 2003; Shulman & Bowen, 2001). Interestingly, another study found that CAs had higher GPA's and graduation rates than non-athletes (Winkler, 2008). According to Emerson and colleagues (2009), the majority of Division III administrators said that CAs should meet the same academic standards as nonathlete students. Other researchers have also argued that high school students who choose to enter a Division III institution considered academic aspects more than those being recruited by or selecting to participate at Division I and II institutions (Katz et al., 2015; Pauline, 2012). Katz et al. (2015) noted two important philosophies regarding NCAA Division III; first, they are solely concerned with the academic and social success of CAs, rather than athletic wins and the national exposure at Division I institutions,

and second, they emphasized the importance of the interconnectedness and mutually beneficial relationship between education and athletics (Smith & Hardin, 2020).

As described above, CAs spend and invest tremendous time in their athletics as well as academics. To be successful in these two dual role (i.e., student and athlete) and overcome their intense schedules, CAs must understand their commitment and motivation towards academics and athletics (Wylleman & Lavallee, 2004). Motivation helps people to improve efficiency and productivity. Motivation can be simply defined as the study of why people act and behave (McClelland, 1985; Weiner, 1992). In general, CAs are highly motivated to succeed in their athletic domain, but less is known about their motivations towards academics, careers, and life after sport, as less than 2% of CAs become professional athletes after their collegiate careers (NCAA, 2018). In turn, about 98% of CAs will retire from their sports after college and prepare to enter a highly competitive job market after graduation.

Numerous studies within the literature have looked at the transitional experience of CAs across the world, but this topic has always been controversial and challenging to find proper solutions (Hart & Swenty, 2016; Lally, 2007; Smith & Hardin, 2018, 2020). Many reasons and factors may have an impact on CAs transitional processes. According to Schlossberg (1984) transitions may happen either normatively or non-normatively (Schlossberg, 1984). Normative transitions are predictable, expected, voluntary, and potentially planned while non-normative transitions include uncontrollable, involuntary, and unexpected situations (Schlossberg, 1984; Stoltenburg et al., 2011). Examples of the normative transition are: end of eligibility or choosing to leave the sport at one's own fruition (Wylleman et al., 2004; Wylleman & Lavallee, 2004). Non-normative retirement can happen due to injury or being cut from the team (Alfermann et al., 2004; Lally, 2007; Rohrs-Cordes &

Paule-Koba, 2018; Stokowski et al., 2019; Stoltenburg et al., 2011). Regardless of how transitions occur, CAs will need adequate skills or support for their life after retirement (Smith & Hardin, 2018, 2020; Taylor & Ogilvie, 1994; Taylor et al., 2006). Thus, educators and administrators have begun to prioritize goals, education, and development in transition, academic, and career planning to allow CAs to proceed to a healthy life in society after their sport (Navarro, 2014). To be better prepared for the transition after sport, CAs may need to start preparing and prioritize academics earlier in their collegiate careers (Ayers et al., 2012).

Athletic transition studies are exceedingly important as unexpected, unwanted, and even pre-planned transitions may significantly affect a CA's life (Taylor & Ogilvie, 1994; Taylor et al., 2006). An investment in academics is a great resource for CAs' lives in general and can give them an outline and direction for when they face their inevitable transition out of sport. To overcome difficulties as a CA, motivation can be one of the most salient components. However, CAs in each NCAA division may have different motivation levels based on their given environmental circumstances. Thus, this study focused on understanding CAs' motivational differences among the three NCAA divisions regarding their dual role (academics and athletics) and career readiness. Previously, studies (Gaston-Gayles, 2004; 2005; López de Subijana et al., 2015; Lupo et al., 2015) have been conducted regarding CA's motivation on dual role, but none of the studies has been conducted regarding the comparison of the three NCAA divisions.

Also, this study used a sequential mixed method design which is a unique method in the field. For the quantitative part, the Sport Motivation Scale-II (SMS-II; Pelletier et al., 1995; Pelletier et al., 2013) was used to measure CAs' motivation towards athletics, and the Academic Motivation Scale (AMS; Vallerand et al., 1992) was applied to measure CAs'

motivation towards academics. After conducting the quantitative part, a qualitative interview follow-up was conducted to further explore CAs' thoughts pertaining to their motivations in their dual role, career readiness and their transition planning.

Purpose Statement/Research Questions:

The purpose of this study is to examine collegiate athletes' motivations regarding their dual role (academics and athletics) based on their NCAA division through a quantitative survey. Based on the results from the quantitative survey, a qualitative study was conducted using a semi-structured interview approach. The follow-up qualitative study deeply explored CAs thoughts and perceptions of their dual role motivations, their career readiness, and future plans after collegiate sport. An interview protocol was established based on Taylor and colleagues (2006) Conceptual Model of Adaptation to Career Transition Model and was used to guide and ensure rigor and trustworthiness in the data collection and analysis process.

The following research questions were examined through this study:

Quantitative Study

RQ 1: What are the current CAs' athletic and academic motivational levels?

RQ 2: Are there statistically significant differences in motivation among the NCAA divisions in academics?

RQ 3: Are there statistically significant differences in motivation among the NCAA divisions in athletics?

Qualitative Study

RQ 4: What are CAs' thoughts and perceptions regarding their athletic and academic motivations?

RQ 5: What are CAs thoughts and perceptions towards their career readiness and future plans after collegiate sport?

CHAPTER II: REVIEW OF THE LITERATURE

Collegiate Athletes' Experiences

In most cases, collegiate athletes (CAs) have five years to complete their four years of NCAA eligibility. During this time period, CAs are expected to perform well in both athletic and academic tasks to avoid losing or limiting their eligibility and scholarships. Researchers have indicated that the NCAA Division I institutional sport and education system in the United States has relevant support to achieve both academic and sport requirements for CAs (Lupo et al., 2015), such as utilizing an academic support center to maintain their eligibility and providing academic advising services. To avoid penalties, academic advisors are required to ensure and keep CAs eligible to compete in their sport (Stokowski et al., 2017). However, although many CAs get support from colleges and universities through various student success programs, centers, and advisors, many support services focus on simply maintaining academic eligibility to play sports (Knight Foundation Commission on Intercollegiate Athletics, 2010).

Researchers have insisted that numerous CAs are often still struggling with their academic performance (Aries et al., 2004), and this happens remarkably often for CAs who play high-profile sports (i.e., football, basketball, and hockey; Simiyu, 2012; Shulman & Bowen, 2001). Particularly, male CAs who play revenue generating sports like football and basketball showed academic underperformance because they reported reading fewer texts and assigned books than male non-athlete students (Simiyu, 2012; Pascarella et al., 1995). Huml and colleagues (2019) argued that even though higher education institutions support developing their CAs academically, the institutions' athletic department seems to want their CAs to focus on athletic success over academic engagement.

In general, CAs are recruited by their institutions for their athletic ability, so a strong emphasis on the athletic role is required for CAs. Many universities have a special admissions committee to recruit prospective CAs who do not meet the institutions' admission standards but are recruited through a special committee due to their athletic merit (Ingram & Huffman, 2017). However, CAs who have been recruited by universities based on their athletic merit have often been shown to be at an increased risk regarding academic performance which affects their athletic eligibility (Ingram & Huffman, 2017). Research has found that athletic commitment is negatively correlated with GPA, and CAs with stronger emphasis on their athletic role tend to have lower GPAs than CAs who indicate a stronger commitment to their academic role (Comeaux & Harrison, 2011; Simons et al., 1999).

Multiple researchers have found that CAs feel stress participating in their sport due to time restrictions, travel, and physical demands (Anshel & Wells, 2000; Lewis, 1991; Petrie, 1992; Yusko et al., 2008). Specifically, Division I CAs often struggle with managing their time due to focusing too much on their sport, the physical toll of their sport, amount of travel, and the emotional strain (Emma, 2008). Even though the NCAA limits the amount of time spent on athletics with the 20-hour rule, NCAA Division I CAs indicated that they spend approximately 40 hours per week on athletic activities including training, recovery, and team meetings (Smith & Hardin, 2018). From this excessive time spent on athletics, CAs often feel and experience fatigue and stressors easily.

Also, as a CA who has just entered a college-level institution, time management, coping with stress, and controlling other environmental factors are not easy tasks. After transitioning from high school to college, CAs face increased academic duties, a new and challenging social environment, and greater athletic expectations (Gaston-Gayles & Baker,

2015). First-year university CAs have noted stressors from various sources including training intensity, coaching changes, high performance expectations, interpersonal relationship, being away from home, and academics (Beamon & Bell, 2006; Galipeau & Trudel, 2004; Hardin & Pate, 2013; Giacobbi et al., 2004; Papanikolaou et al., 2003; Pate et al., 2011; Tracey & Corlett, 1995).

Specifically, CAs experienced various stressors during their transition to higher competitive levels such as competition readiness, ability to demonstrate competence, earning playing time, performance evaluation, adjusting to a new coach, higher standards of training, developing familiarity and relationships with new teammates, the loss of star status from high school, the potential for injuries, and the prospect of being benched (Beauchemin, 2014; Bruner et al., 2008; MacNamara & Collins, 2010). In general, research has indicated that athletes who are younger, less mature, and less prepared to endure these changes experienced greater stress than others (Schlossberg, 1981).

Transitional experiences into college can be impacted by environmental factors including the type, quality, and availability of support systems (Schlossberg, 1981). Regarding the aforementioned factors, Ashwin (2003) conducted a study with non-athlete students and revealed that first-year students showed enhanced academic performance when they had higher levels of peer support and higher quality friendships. Also, other studies have explored first-year students and found that they experienced lower levels of depression, anxiety, and stress levels with higher levels of peer support and friendships (Mounts et al., 2006; Rodriguez et al., 2003).

Moving beyond the first year in college, recent studies have indicated other challenges occur throughout the collegiate process for CAs, such as physical fatigue, training

requirements, competitions, class schedules, injuries, higher rest and recovery demands, student-sport identity issues, and novel training environments (Parker et al., 2016). These additional stressors can have a negative impact on their academic performance and motivation (Parker et al., 2016; Simons et al., 1999). CAs need to be motivated to overcome the diverse challenges and difficulties they may face while conducting their dual role of athletics and academics. To overcome the challenges, the relationship between athletes and coaches may be very important. Jowett and Cockerill (2003) conducted a study which focused on exploring the nature of the coach-athlete relationship within the context of three interpersonal constructs of closeness, co-orientation, and complementarity with 12 Olympians. Through a qualitative approach, the researchers revealed that athletes' interpersonal relationship between coach and athlete is an important factor that contributes to the athlete's development (Jowett & Cockerill, 2003). The researchers also emphasized the ability of coaches to develop an effective relationship with their athletes because it could have a significant impact on athletes' performance and wellbeing (Jowett & Cockerill, 2003).

Challenges and Benefits for Collegiate Athletes

As mentioned above, to be a successful CA, one needs to overcome various stressors and barriers from both athletics and academics. After leaving high school and entering college, CAs can face unique and various pressures that may affect their academic performance and motivation. CAs are required to fulfill both athletic and academic roles to successfully conduct their requirements as a CA and receive benefits by doing so. To avoid limiting their athletic eligibility and benefits, CAs should put a certain amount of effort and time into academics while they compete as an athlete for their institutions. However,

balancing performance and interests for both academic and athletic roles may be incredibly difficult for CAs.

The academic success of CAs, particularly for NCAA Division I institutions, continues to receive attention in the literature and media (Gaston-Gayles, 2004), and the NCAA recognizes the importance of academic success for CAs. Researchers have indicated that the academic success of CAs can be measured using graduation rate (Gottschalk & Milton, 2010), and GPA in comparison to other nonathlete peers (Maloney & McCormick, 1993). Majority of colleges gets funding from their states, and the states want universities to improve the retention and graduation rates of their students (Huml et al., 2019). However, this situation has led to greater scrutiny on students who are academically at risk, particularly CAs who are generally less motivated than other non-athlete students (Wolverton, 2015; Yopyk & Prentice, 2005). Under this circumstance, the NCAA has put tremendous efforts in place to improve CAs' graduation and retention rates, and now CAs have shown better rates in both graduation and retention than their non-athlete peers (Hosick, 2015).

In order to keep high graduation and retention rates among CAs, there are many people who are involved in assisting CAs in both their academic and sporting endeavors, including academic advisors, coaches, institutions' psychologists, and other consultants. For instance, athletic programs provide CAs assistance with missing classes as a result of travel for competition or athletic activity related schedules. Universities are providing more resources to CAs' academic services than ever before (Bell, 2009; Huml et al., 2014), especially Division I programs. Division II and III universities also provide academic assets to their CA populations but have fewer support staff and resources for academic development, and deal with more budgetary limits than Division I institutions (Nite, 2012).

In general, however, Division I CAs prioritize athletic performance over academic achievement. Due to the enormous amount of time spent on their athletic performances, Division I CAs have shown that they have less time for academic preparation resulting in lesser forms of academic success than non-athlete student peers. Also, non-athlete students have the freedom to explore courses, majors, and other academic related activities while CAs have higher restrictions due to their athletic time demands and the surveillance of coaches and administrators (Beamon, 2012; Hatteberg, 2018; Smith & Hardin, 2018). Furthermore, athletic departments are many times isolated from the rest of the main campus, which creates their own sub-cultures/control (Jayakumar & Comeaux, 2016; Hatteburg, 2018; Schroeder, 2010). As stated above, many Division I CAs struggle to achieve success during their college life, especially CAs who participate in revenue generating sports, such as football and men's basketball. Furthermore, Gaston (2002) stated that CAs may not be successful in their academics because of their "athletic dream". Athletic dream is defined as:

> A multidimensional set of behaviors and fantasies propelled by the desire to pursue super-stardom and upward mobility through sport participation. The ultimate result is a potential professional athletic career where 'the dream' can be lived out (Parmer, 1994, p. 333).

Parmer (1994) pointed out that even though there is nothing wrong with having the athletic dream, it may negatively influence CAs balance between academics and athletics. These issues are salient problems for black male collegiate athletes (Parmer, 1994; Briggs et al., 2021). Beamon and Bell (2006) quantitatively conducted a study with a Division I football team and revealed that African American CAs had more emphasis on athletics than academics during their socialization process. They also showed having less emphasis on education than

White participants (Beamon & Bell, 2006). Beamon (2012) also conducted a study with the participants of 20 African American former Division I CAs using a qualitative approach. Through this study, the researcher revealed that African American CAs had more difficult experiences than White CAs in terms of various areas such as career maturity, sports socialization, sports career aspirations, and student-athlete academic success (Beamon, 2012).

CAs may feel an increased sense of academic pressure during their first year because of higher levels of academic rigor and their new environment (Gaston-Gayles & Baker, 2015). Non-athlete students may experience the same pressure and difficulties during the first year. However, CAs are required to maintain class schedules and GPAs with their athletic activities at the same time to avoid limiting or losing benefits of being a CA (Miller & Kerr, 2002). Researchers examining predictors of academic achievement for CAs found that the most common predictors of academic performance influence for CAs were high school GPA and rank, standardized test scores, and parental education (Ervin et al., 1985; Gaston-Gayles, 2004; Purdy e al., 1982). To improve CAs' academic performance, institutions may use a developmental program. For instance, the Ervin et al. (1985) conducted a quantitative study with revenue-producing sport CA participants to see whether a development study program influenced their academic performance or not using their College Board Scholastic Aptitude Test (SAT). The results showed that CAs who were enrolled in the developmental study program showed higher academic performance than others (Ervin et al., 1985).

Many studies have also examined how demographics, pre-college, and social factors impact CAs' academic performances (Bowen & Levin, 2003; Pascarella et al., 1996; Olani, 2009; Sellers, 1989, 1992; Shulman & Bowen, 2001). Among many pre-college characteristics associated with college success, previous research has indicated that family

background, educational experiences and preparation, and individual characteristics have a great impact on college success, especially academic performance (Astin, 1993; Olani, 2009; Sellers, 1989). These factors showed a positive relationship between the variables mentioned above and college success (Astin, 1993). For instance, if CAs are from higher socioeconomic status families, they most likely had a higher academic success rate than CAs from lower socioeconomic families (Sellers, 1992).

In terms of educational experiences and preparation, research has found that there is a significant positive relationship between high school GPA and college success among CAs (Comeaux, 2005). Previous research also has found that CAs might have differences in academic success based on sport, race and ethnicity, gender, and competition level (Eitzen, 1988; Le Crom et al., 2009). Eitzen (1988) found men's revenue generating sport CAs, including football and basketball, tended to be less successful academically than their other CA peers. Particularly, Black CAs tend to be less prepared for their academics and have more insufficient background than other CAs (Eitzen, 1988; Briggs et al., 2021). Other research has indicated that Black CAs' academic underperformance and negative psychosocial experiences can happen due to unwelcoming campus climate, inadequate academic support, and an overemphasis on their athletic roles (Beamon, 2008; Cooper, 2016; Simons et al., 1999).

Female CAs had significantly higher academic preparation and performance compared to their male CAs. Division I CAs tended to have lower academic performance than other non-athlete students. Le Crom et al. (2009) collected data from 12,980 Division I CAs, and their results showed that gender and type of sport were significant predictors of retention. Specifically, female and individual sport CAs showed a higher retention rate than male and team sport CAs (Le Crom et al., 2009).

Researchers have indicated that social factors are also influential in the success of CAs. Athletic administrators and coaches are often isolated from the campus and independently operate only for athletic programs (Rubin & Moses, 2017; Simons et al., 1993). Also, CAs may feel isolated from other students as they spend tremendous amounts of time participating in their sport related activities such as games, training, and meetings off of campus (Martin, 2009; Simons et al., 1993). For these reasons, CAs may suffer performing their dual role successfully, and other people on campus including professors and non-athlete students often see CAs negatively (Simons et al., 2007), especially Black CAs who encounter negative stereotypes and even racial discrimination in the classroom (Beamon, 2012; Cummins & o'Boyle, 2015). Additionally, researchers have noted that faculty and non-athlete students frequently view CAs as getting undeserved special privileges, such as extra tutoring and early course enrollment (Melendez, 2008; Simons et al., 1999). To resolve this problem, researchers have suggested that athletic department staff should be more involved in the lives of CAs, and faculty and academic support staff need to be more involved in the athletic recruiting process so that CAs can feel their value as students as well as athletes (Burns et al., 2013; Simons et al., 1993).

Athletic Identity

A person's identity can be composed of self-identity which is how one views oneself and social identity which is how other people view the person (Beamon, 2012). In general, majority of athletes start to play sports when they are very young, moving from leisure and play to serious sport commitment. Along this athletic path, athletes tend to choose their future and self-identity before they have achieved other possible options, roles, and statuses (Beamon, 2012). Researchers have indicated that the level of commitment and dedication

which is needed to accomplish athletic goals may restrict athletes' identity development outside of the athletic sphere (Beamon, 2012; Chartrand & Lend, 1987; Pearson & Petitpas 1990). For example, Lally (2007) conducted a longitudinal study interviewing three male and three female CAs three times to understand their identity and athletic retirement. The results of the study indicated that CAs were negligent of their student role in their earlier academic classification, but they were influenced by their friends, family, coaches, or mentors to explore their future career as they approached sport retirement (Lally, 2007). However, many friends, families, and even strangers often consider CAs value to be dependent on athletic participation and success, and this causes further solidification of their athletic identity and difficulty processing sport retirement or transition (Beamon, 2012).

Athletic identity has been defined as "the degree to which an individual identifies with the athletic role" (Brewer et al., 1993, p. 237). Athletic identity (athlete's athletic involvement and experience) can have an impact on an athlete psychologically and cognitively. Possessing a strong athletic identity can influence athletes both positively and negatively. Researchers have identified that having a strong athletic identity can be linked to positive outcomes (Brewer et al., 1993; Marsh et al., 1995; Phoenix et al., 2005), while many researchers have argued about negative repercussions of having a strong athletic identity (Blinde & Stratta, 1992; Grove et al., 1997; Kidd et al., 2018; Lotysz & Short, 2004; Lavallee, 2005; Lally, 2007; Lavallee & Robinson, 2007; Stoltenburg et al., 2011; Smith & Hardin, 2018, 2020; Stokowski et al., 2019; Wippert & Wippert, 2008; Yukhymenko-Lescroart, 2018). For instance, having a strong athletic identity, as a salient self-identity or sense of self can have positive effects on athletic performance and help athletes maintain long-term involvement in exercise behaviors (Phoenix et al., 2005). Furthermore, Yukhymenko-Lescroart (2018)

recently conducted a cross-sectional study with 1,151 NCAA Division I CAs and found that CAs with strong athletic identity had greater possibility to achieve their athletic goals. On the other hand, some negative effects of having strong athletic identity were also found in Yukhymenko-Lescroart's study (2018). For instance, CAs with strong athletic identity can be unethical in their fields of play (Yukhymenko-Lescroart, 2018).

Lally (2007) revealed that CAs who had a higher degree of athletic identity experienced more negative emotions, including feelings of loss, isolation, and fear of an uncertain future, and took a longer time to adjust to post-sport life than those who had a more balanced identity. In addition, many studies have found that CAs with a strong athletic identity tend to neglect other aspects of life such as personal and social development to fulfill their athletic role (Bimper, 2014; Brewer et al., 1993; Murphy et al., 1996; Watson & Kissinger, 2007; Woodruff & Schallert, 2008; Smith & Hardin, 2018). Rohrs-Cordes and Paule-Koba (2018) conducted a qualitative study with 12 NCAA Division I CAs who suffered career-ending injuries and found athletes with a strong athlete identity often experienced a difficult time finding their new personal identity during their transition process. CAs have higher possibilities of injuries than nonathlete students due to their athletic activities. For this reason, CAs who have high athletic identity have used social support as a tool to help themselves make the emotional, physical, and psychosocial changes for positively transitioning out of sport (Grove et al., 1997; Rohrs-Cordes & Paule-Koba, 2018; Stoltenburg et al., 2011). Another deficit of having a strong athletic identity is that CAs with strong athletic identity showed poor academic performance and experienced struggles with their athletic eligibility (Lally & Kerr, 2005; Yopyk & Prentice, 2005). Athletic identity is essential

for athletes to perform well in their sport both mentally and physically, while it can be also harmful to them simultaneously (Brewer et al., 1993).

Athletic identity can be established by performing long-term athletic activities. According to the developmental model of transitions faced by athletes (Wylleman & Lavallee, 2004), youth athletes are required to compete in their sports around 10 years to achieve elite performance, and they need an additional five to 10 years to compete at the highest level (Wylleman et al., 2004; Wylleman & Lavallee, 2004; Wylleman & Reints, 2010). The model was developed based on the research data on the career development of young students, athletes, CAs, professional and elite athletes, and former Olympians (Wylleman et al., 2004; Wylleman & Lavallee, 2004). It represents the stages and transitions that athletes may face in their athletic development, including four stages such as initiation, development, mastery, and discontinuation stages. This kind of lifestyle may lead to the development of a strong athletic identity. During the initiation stage, young athletes can experience and be introduced to sports, followed by the development stage. In the development stage, athletes become more dedicated to their sport and spend more time on training and sports-related activities. For the mastery stage, athletes typically perform their highest level of athletic ability and reach for the professional level. After the highest level, athletes are transitioning from active participation to discontinuation from competitive sport (Wylleman & Lavallee, 2004).

Studies have found athletes' social and personal factors, such as lifestyles, social networks, social recognition, and occupations, influenced their sense of self (Brewer et al., 1993; Stephan & Brewer, 2007). Furthermore, researchers have indicated that athletic identity can affect CAs athletic experiences and the termination of their sport career (Lavallee & Robinson, 2007). According to previous research, athletes who had strong athletic identities

experienced high degrees of adjustment difficulties when they faced a transition out of sport, and the athletic identity tends to weaken after retirement from sport, but this process takes time that varies depending on the athlete (Beamon, 2012; Kerr & Dacyshyn, 2000; Lally, 2007; Smith & Hardin, 2018; Smith et al., 2018). Also, researchers have argued that if CAs have a strong athletic identity, it is challenging to change their identity, and additional effort is necessary to develop a stronger academic identity (Beamon, 2012; Lally & Kerr, 2005; Miller & Kerr, 2002). Beamon (2012) found through their interviews with 20 African American former Division I CAs that strong athletic identity negatively affected participants' transition out of sport because they struggled to redefine their identities. When athletes consider retiring from their sport, the athletic identity has significant relationships to coping processes, emotional and social adjustment, pre-retirement planning and anxiety about career decision-making (Grove et al., 1997). Those factors are very important for CAs' transition process out of sport.

Transition Out of Sport

Only a few CAs can continue their athletic careers as professional athletes after college, and the majority of CAs should find alternatives before graduation. In this case, CAs' focus on academics or other achievements outside of sport can be significant resources to prepare them for life after sport. Research on athletes' transitions in sport has been growing over the past three decades. Since the 1970s, sport psychologists and researchers have been interested in focusing on topics regarding two clearly identifiable transitions in the sport field, transition into and out of sport (Wylleman & Lavalle, 2004). The early studies in the athletes' career transition field were conducted by Mihovilovic (1968) and Haerle (1975). In Mihovilovic's (1968) study, 44 Yugoslavian amateur soccer players participated in the study,

and the results showed that more than half of the participants experienced negative emotions after the sudden elimination from their sports. Haerle (1975) collected data from 312 former professional baseball players and found that many participants expressed negative emotions regarding their sport career ending, and the majority of the participants thought about their after-sport lives when their retirement became imminent.

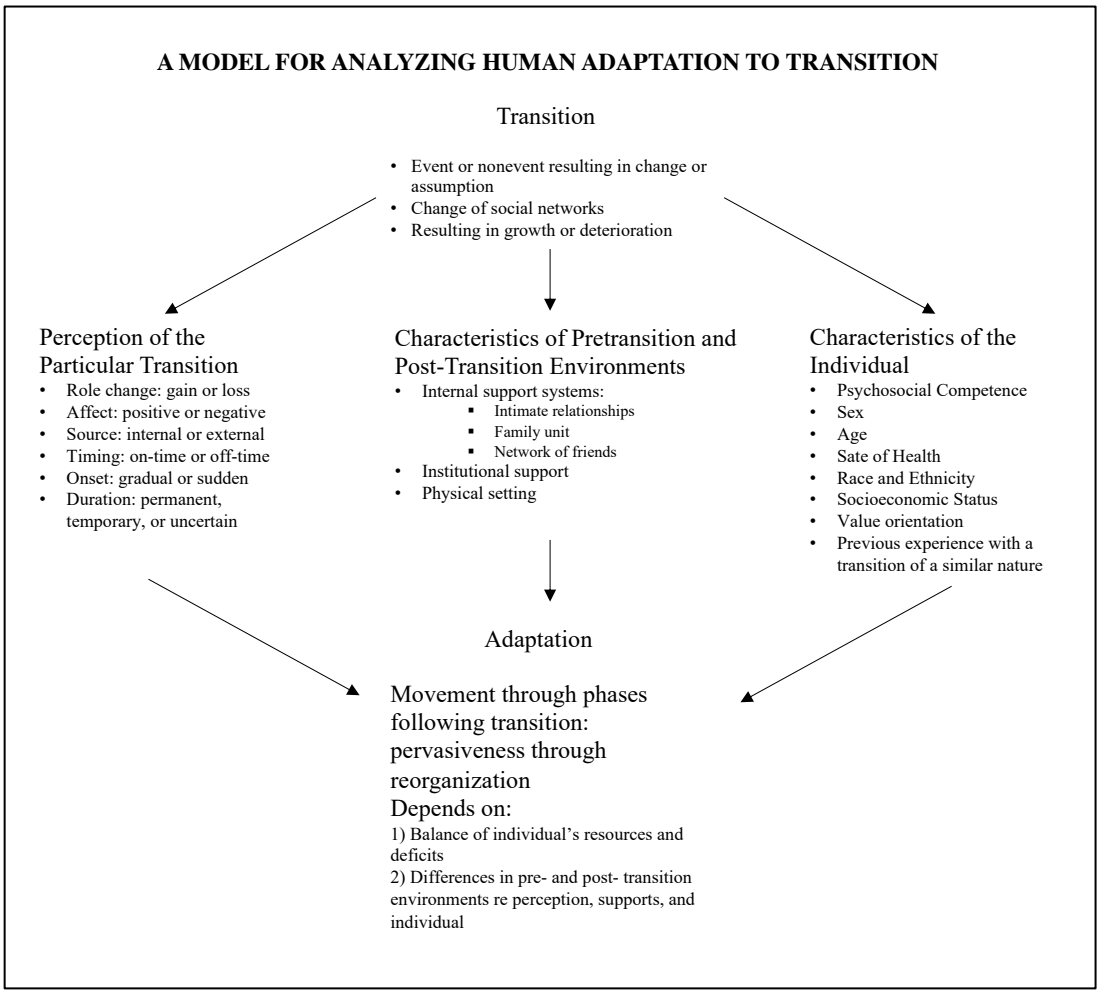
Among sport psychology and management research studies, Schlossberg's (1981) model of human adaptation to transition is one of the models most commonly applied theories to explore athlete transition. Schlossberg's (1981) developed a model that explains variables which can affect individuals' outcomes of their transition. According to Schlossberg (1981), "a transition can be said to occur if an event or non-event results in a change in assumptions about oneself and the world that requires a corresponding change in one's behavior and relationships" (p. 5). Also, Schlossberg (1981) argued that the primary importance of transition is how it fits with an individual's stage, situation, and style when the transition occurred. The model consists of three major sets of factors that affect adaptation to transition: (1) "the characteristics of the particular transition, (2) the characteristics of the pre- and post-transition environments, and (3) the characteristics of the individual experiencing the transition" (Schlossberg, 1981, p.5) (See Figure 1). All three factors interact and affect the outcome of the transition process (Schlossberg, 1981).

Furthermore, in applying Schlossberg's (1981) model to sport transitions, these transitions occur when athletes discontinue their athletic activities (Kleiber & Brock, 1992), and it may happen either normatively or non-normatively (Schlossberg, 1984). Normative transitions are predictable, expected, voluntary, and potentially planned. On the other hand, non-normative transitions are uncontrollable, involuntary, and unexpected (Schlossberg, 1984;

Stoltenburg et al., 2011). For athletes, there may be three types of normative transitions, including age, structural or organizational characteristics of competitive sports, or athletic proficiency (Wylleman & Lavallee, 2004). Simply, advancing from lower level to higher level

Figure 2.1

Model of Analyzing Human Adaptation to Transition



Note. Modified from "A model for analyzing human adaptation to transition" by Schlossberg, 1981, *The counseling psychologist, 9(2),* p. 5.

such as from junior to senior level in school can be one of the examples for the transition in age. For instance, Bussmann and Alfermann (1994) found that only one fourth of 51 track-and-field national elite junior athletes continued their sport to the national senior level.

Transitioning from high school to college level can be an example of transition for structural or organizational characteristics of competitive sports. For an example of the athletic proficiency, if an athlete improves his or her level of skill, the athlete will go from regional to national level or even higher such as moving up as a competitor for the Olympic Games or World Cup.

In general, non-normative transitions tend to be more stressful than normative transition because athletes are less prepared for these situations (Stambulova et al., 2009). For instance, a season-ending injury, the loss of a personal coach, or an unanticipated "cut" or termination from the team, those things can be examples of a nonnormative transition for athletes (Paule-Koba & Rohrs-Cordes, 2019; Wylleman & Lavallee, 2004). One of the problems for athletes who experience a nonnormative transition, particularly Division I career-ending injured CAs, was that they felt more isolated during their transition process out of sport because they did not receive adequate support from their team or athletic administration (Rohrs-Cordes & Paule-Koba, 2018).

Most people, whether an athlete or not, may feel a sense of difficulty when they face significant changes in life. If the changes come as an expected situation, it is less stressful due to the time and level of preparation. However, if a change comes as an unexpected or unwanted situation, it may be more problematic. In athletics, transitions can happen for voluntary or involuntary reasons. Voluntary reasons have two aspects, athletic and non-athletic reasons, including performance, loss of passion, an accomplishment of sporting goals, pursuing goals outside sport career, and critical life changes (Alfermann et al.,2004; Cecic´ Erpic˘ et al., 2004; Stambulova et al., 2007; Martin et al., 2014; Young et al., 2006). Involuntary reasons include injury, age, and deselection.

Studies have found that athletes who are prepared and experienced career planning before their retirement have higher levels of perceived personal control resulting in an ability to successfully adapt to their life after their athletic career (Alfermann et al., 2004; Stambulova et al., 2007; Taylor & Ogilvie, 1994). The preparation includes a variety of activities such as education and social networking activities (Park et al., 2013; Taylor et al., 2006). Researchers have indicated that when CAs have the ability to properly transfer skills (e.g., time management, leadership, performing under pressure, organization) learned from their sport into other aspects of life, the transitional experience often is positive (Bardick et al., 2009; Smith & Hardin, 2018, 2020; Stankovich et al., 2001). Furthermore, athletes that have support from family, friends, significant others, coaches, and trainers are more likely to experience a positive transition out of athletics (Fernandez et al., 2006; Wippert & Wippert, 2008; Young et al., 2006).

Some researchers have suggested that athletes need adequate and healthy social support for successful athletic career transitions (Adams et al., 2015; Ofoegbu et al., 2021). In their study, Adams et al. (2015) surveyed 70 CAs who participant in sport clubs in a university in Scotland. This study categorized social support as four different categories, including: (a) emotional – presence of optimistic cheering; (b) esteem – presence of a person or object to provide constant encouragement; (c) informational – a coach or trainer who improves athletic skill; and (d) tangible – parent or guardian support (Adams et al., 2015). According to the findings of the study, CAs rated emotional support as the most available type of support, and tangible support was rated as the least available type of social support (Adams et al., 2015). They also emphasized the importance of the roles of coaches in providing social support for athletes in their study (Adams et al., 2015).

Many CAs experience a difficult time during their transition out of sport. A recent study found that most of its Black revenue-generating CA participants expressed experiencing challenges during their athletic career transition (Kidd et al., 2018). This study was conducted with NCAA Division I football, men's basketball and baseball players, and the participants specifically reported that they felt a "loss" when they were asked about their transition experiences and did not view their jobs as a career (Kidd et al., 2018). Researchers have indicated that athletes' feeling a traumatic sense of loss from transitions out of sport can be akin to the death of a loved one of divorce (Beamon & Bell, 2011; Kidd et al., 2018; Saxe et al., 2017, Smith et al., 2018). Also, researchers have pointed out that athletes may experience a negative transition process due to identity foreclosure (Beamon, 2012; Harrison et al., 2013; Scales, 1991). Identity foreclosure is defined as a commitment to an identity before one has meaningfully explored other options or engaged in exploratory behavior, such as career exploration, talent development, or joining social groups (Danish et al., 1993; Marcia, 1966). Due to the extensive time demands noted in the aforementioned sections, CAs may not have enough opportunities to explore their identity and future life in comparison to their non-athlete student peers. This may cause difficulty for CAs to discover other talents or interest that they can consider as careers after their athletic performances cease.

The NCAA (2020) indicates that there are approximately 170,000 CAs competing in Division I college level per year in the United States. Among them, 94,227 CAs are graduating with a graduation rate of 86%, and less than 2% of CAs become professional athletes after their collegiate careers (NCAA, 2018). Since there are significant numbers of CA who end their athletic career after college every year, many CAs emphasize the important role that the NCAA should provide in supporting CAs (Rohrs-Cordes & Paule-Koba, 2018).

For instance, many CAs have suggested the NCAA should use its governing power to require institutions to provide some structured supportive programs/services to help CAs' transition out of their sport (Rohrs-Cordes & Paule-Koba, 2018). In addition, researchers have suggested that the integration of academic, social, and occupational enrichment activities will help athletes prepare for their career transition after sports (Kidd et al., 2018). Also, researchers have recommended that proactive programing, developed by a non-athletic department will positively help athletes' lives after their athletic careers (Kidd et al., 2018).

Conceptual Models of Career Transition

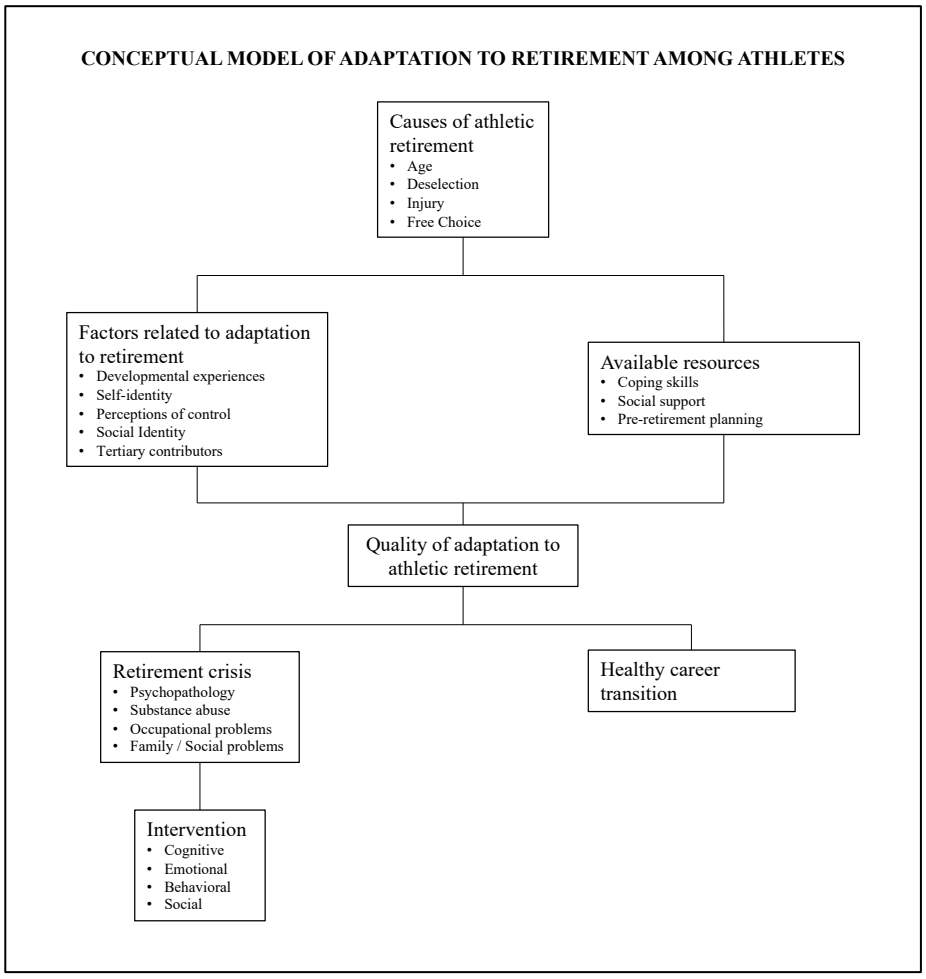
Taylor and Ogilvie (1994) developed a conceptual model of adaptation to retirement among athletes based on the retirement from sport literature, and this model is one of the most widely used models explaining athletic retirement. In 2006, Taylor and colleagues updated the model from 'A conceptual model of adaptation to retirement among athletes' to 'Conceptual model of adaptation to career transition'.

Figure two shows the updated model 'Conceptual Model of Adaptation to Retirement' (Taylor et al., 2006). The model begins with the causes of career termination, which may play a crucial role for adjustment after athletic career, including age, deselection, injury, and free choice. After experiencing a career termination, athletes need skills and resources for adaption to career transition. In this model, Taylor et al. (2006) indicated the factors related to adaptation to career transition, including developmental experiences, self-identity, perceptions of control, social identity, and tertiary contributors. As available resources for adaptation to career transition, the researchers emphasized coping strategies, social support, and pre-retirement planning. With the relevant factors and resources, the quality of career transition for athletes is determined; an athlete either proceeds to a healthy career transition or career

transition distress. If athletes experience career transition distress, they may undergo adjustment difficulties, occupational or financial problems, family or social problems, psychological problem, or even substance abuse. In this case, athletes need intervention to

Figure 2.2

Conceptual model of adaptation to retirement among athletes



Note. Modified from "Conceptual model of adaptation to retirement among athletes" by Taylor & Ogilvie, 1994, *Journal of Applied Sports Psychology, 6(1).*

recover from the career transition distress to healthy transition (Taylor et al., 2006). This study used the model to guide the qualitative part exploring CAs' future transition process and available resources.

Motivation and Career Readiness

In the field of sport psychology, motivation has been defined as the intensity and direction of effort (Weiss & Ferrer Caja, 2002), and it is usually considered as one of the most important factors for people's behavior. Motivation can also be defined as the intensity and direction of behavior (Silva & Weinberg, 1984). Intensity is how much effort a person puts toward a given task, and direction of behavior refers to the choice to complete or not to complete a given task (Gaston, 2002). Since motivation has a significant impact on people's behavior, understanding athletes' motivation has been an important topic for many researchers and practitioners.

CAs have a significant amount of pressure put on them, and they are required to be motivated to perform successfully in their academic and athletic commitments compared to professional athletes or non-athlete students. For this reason, research has suggested that CAs have an uneven degree of motivation towards academic and athletic roles (Simons et al., 1999). The amount of effort that CAs apply to academics and athletics may vary due to their given circumstance (e.g., NCAA division, sport, influence from coaches, family, peers, professional sport aspirations). Even though many CAs want to find their career options through sports rather than finding different directions (Lucas & Lovaglia, 2002), only a very small percentage of CAs have the opportunities to fulfill the dream of professional sport as their future job. CAs' demands for both athletic and academic performances require tremendous efforts due to their intense schedules, so it is very difficult to have the same motivation or reasons for attending college and participating in their sport. In fact, some researchers have argued that the institutional demands of sport may make it difficult for CAs

to maintain relevant degrees of motivation, both academically and athletically (Weathington & Rodebaugh, 2010).

In general, coaches play a crucial role in the motivation of CAs, especially their athletic performances, and coaches' indirect behaviors may have an impact on athletes' motivation, mood, and effort (Weinberg & Gould, 2003). CAs have their own motivation, preference, or perception related to conducting their dual role. Gaston (2002) explained CAs as three types; 1) "CAs who attend college to play their sport; 2) CAs who are motivated to play their sport and equally motivated to achieve a college degree; 3) CAs who are most concerned with pursuing their college degree" (p. 5). Gaston (2002) mentioned that the first type of CAs often neglect their academic responsibilities and spend more of their time and effort to pursue their athletic dream. This type of CA mainly performs their academic roles to maintain their eligibility. The second type of CAs have dual goals, such as achieving a degree and performing well in their sport at the same time (Gaston, 2002). The last type of CAs plays sport to achieve their degree from their institutions (Gaston, 2002). They mostly compete in their sport to receive financial aid from their institutions.

CAs' motivation toward their dual role may be different based on institutions' NCAA division, ethnicity, or other factors. Snyder (1996) conducted a quantitative study to examine 327 male CAs' athletic and academic motivations at both Division I and Division III schools, and the findings indicated that at Division I institutions, African American athletes had a higher desire to play at the professional level than White athletes at Division I institutions. However, CAs at Division III institutions were less willing to strive to play sports at the professional level (Snyder, 1996). Other researchers found that family structure, socioeconomic status, and gender had a linear relationship with the academic performance of

African American basketball players (Reynold et al., 2012). Particularly, gender and socioeconomic status had a positive impact on the academic performance among the CAs (Reynold et al., 2012). The study indicated that female student-athletes showed a higher performance in the classroom setting, and their overall graduation rate was higher than male CAs (Reynold et al., 2012). The research also showed that CAs from wealthy families had better academic performances than other CAs (Reynold et al., 2012). From a motivation perspective, Sellers (1992) argued that even though African American athletes started college with less prepared performance, they were not less motivated as a result. Sellers (1992) focused on finding differences in the predictors of college GPA based on race and found that African American CAs' academic achievement can be predicted by high school GPA and mother's occupation.

As has been previously stated, motivation can be one of the most significant roles to survive and successfully perform the intense schedule and dual role of being a CA. However, studies have mostly focused on CAs' athletic performance, and a few studies have been conducted to find relationships between CAs' athletic motivation and academics. In general, CAs are perceived to be less academically motivated (Wolverton, 2015; Yopyk & Prentice, 2005) because many CAs prioritize their sport over academics, especially, revenue generating sport CAs. Revenue generating sport CAs such as men's football and basketball often perform their sport to achieve extrinsic rewards such as financial support (Gaston, 2002). Furthermore, female CAs seem to be more academically motivated and less athletically motivated than male CAs (Doupona Topič, 2005).

Simons et al. (1999) conducted their study to explore the academic motivation of CAs guided by Self-Worth Theory. The participants for this study were 361 Division I CAs, and

this research is one of the most cited and early studies examining CAs' motivation towards academics. Among various motivational theories, Simons and colleagues (1999) constructed an instrument which was established based on Self-Worth Theory. According to Covington (1992), Self-Worth Theory "assumes that the search for self-acceptance is the highest human priority, and that in school's self-acceptance comes to depend on one's ability to achieve competitively" (p.74). In Self-Worth Theory, Covington (1992) proposed four motivational types based on the perceptions of success and failure: Success Oriented, Overstrivers, Failure-Avoiders and Failure-Acceptors. Simons and his associates (1999) found that Failure-Avoiders and Failure-Acceptors showed more mediocre academic performance than the Success-Oriented and Overstriver CAs. Also, Failure-Avoiders and Failure-Acceptors were more committed to their athletic role than the other two types of motivation. Motivation is a critical component to enhance humans' performance. Various motivational theories can be used to determine Cas' motivation regarding the dual role. Among them, Self- Determination Theory which is one of the favored theories in motivational studies, which was used to guide this study.

Theoretical Framework: Self-Determination Theory

Among many motivation theories, Self-Determination Theory (SDT) is a renowned theory in the field of educational psychology, and it has been used in the field of sport management recently to better understand consumers' behavior (Aicher & Brenner, 2015; Funk et al., 2012). In the field of sport psychology, SDT has been used to examine and explore athletes' motivation including CAs (Amorose & Anderson-Butcher, 2007; Felton & Jowett, 2017; Hollembeak & Amorose, 2005; Mallia et al., 2019; Readdy et al., 2014). For instance, Hollembeak and Amorose (2005) examined the relationship between perceived

coaching behaviors and CAs' intrinsic motivation with 280 NCAA Division I CAs using the Sport Motivation Scale (SMS). The study found that coaching behaviors significantly predicted perceived intrinsic motivation.

SDT focuses on the degree to which an individuals' behavior is self-motivated and self-determined based on the psychological needs for autonomy, relatedness and competence (Ryan & Deci, 2000). If an activity fulfills the three psychological needs, autonomy, competence, and relatedness, the activity will be considered as it is freely chosen and self-determined. Autonomy can be explained as peoples' belief that they have control over their actions. Competence is a need that people want to develop and improve their skills. Finally, relatedness represents the need to feel a sense of belonging to a group. Previous research in sport has found if athletes feel autonomous, competent, and relatedness to a group, they felt more self-determined (Amorose & Anderson-Butcher, 2007, Vella et al., 2021).

SDT also addressed that there are three dimensions to explain people's motivation: intrinsic motivation, extrinsic motivation, and amotivation (Ryan & Deci, 2000). In other words, people's behavior can be intrinsically motivated, extrinsically motivated, or amotivated (Deci, 1975; Deci & Ryan, 1985; 1991).

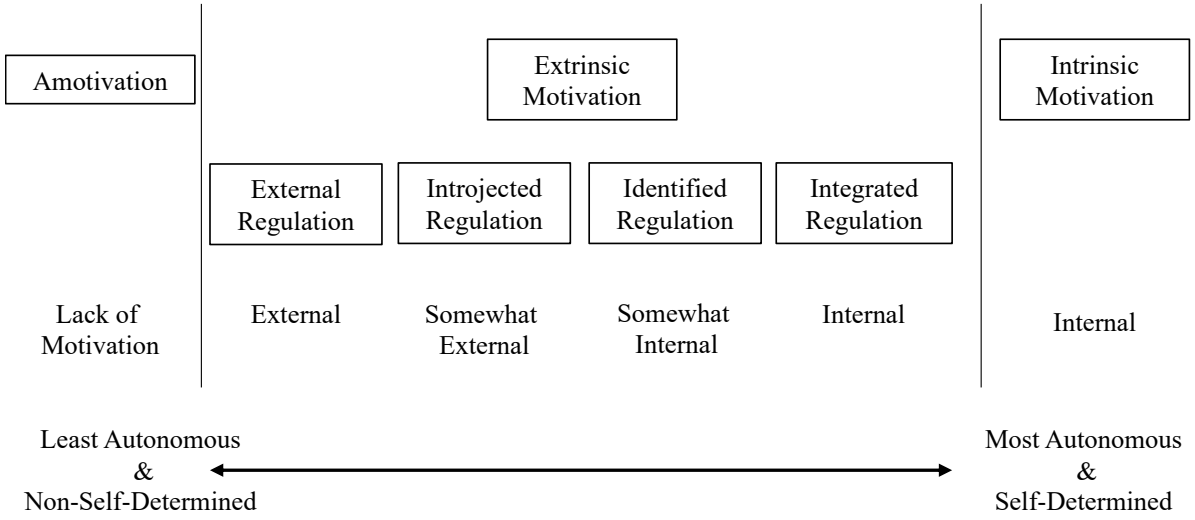
Intrinsic motivation is defined as an engaging activity for its inherent satisfaction, such as interest and challenge (Ryan & Deci, 2000). Intrinsic motivation can be also referred to as engaging in an activity because of pleasure and satisfaction by doing the activity (Deci, 1975). For instance, when a person is intrinsically motivated, the person will perform the behavior voluntarily without any material rewards or external constraints (Deci & Ryan, 1985).

While intrinsic motivation refers to doing an activity for the inherent satisfaction of the activity itself, extrinsic motivation is a construct that posits an activity is done in order to

attain some external rewards (Ryan & Deci, 2000). For instance, Gaston (2002) stated that CAs who participate in revenue generating sports such as men's football and basketball may play their sports because of extrinsic rewards such as financial support, social status, etc.

Figure 2.3

Self-Determination Continuum



Note. Modified from "The Self-Determination Continuum Showing Types of Motivation with Their Regulatory Styles, Loci of Causality, and Corresponding Processes" by Ryan & Deci, 2000, American Psychologist, 55.

Extrinsic motivation can be separated by four levels based on how the motivation is controlled by external factors. First, external regulation is the most extrinsically motivated level and adopts a behavior to obtain a reward or to avoid punishment (Ryan & Deci, 2000). In general, external regulation can be described as the contrast of intrinsic motivation. Introjected regulation is an internal pressure either to pursue self-worth or to avoid guilt and shame (Ryan & Deci, 2000). Ryan and Deci (2000) described introjected regulation as acting to avoid guilt or anxiety. Identified regulation explains internalized behaviors that are identified as personally meaningful (Ryan & Deci, 2000). It is a more self-regulated form of

extrinsic motivation than the above two regulations. Lastly, integrated regulation is behaviors that are congruent with one's own values and needs but still have some external aspect (Ryan & Deci, 2000). This is the most autonomous form of extrinsic motivation. Amotivation can be simply defined as a lack of motivation. In this case, people cannot see a connection between their actions and the potential outcome (Alderman, 2008). Ryan and Deci (2000) described that when a person is amotivated, the person act without intent or does not act at all.

Initially, many scholars thought intrinsic motivation was positive, and extrinsic motivation was negative. For instance, researchers indicated that people who are intrinsically motivated are more likely to work hard when extrinsic rewards are not available (Vallerand, 1997; Vallerand & Losier, 1999; Weiss & Ferrer Caja, 2002). Also, intrinsically motivated people experienced less performance-related anxiety and more willingness to learn skills than people with extrinsic motivation (Vallerand, 1997; Vallerand & Losier, 1999; Weiss & Ferrer Caja, 2002). Later, however, Ryan and Deci (2000) described SDT as a continuum which means that human's motivation could be shifted from amotivation to extrinsic motivation, and extrinsic motivation to intrinsic motivation based on factors or rewards. Amorose and Anderson-Butcher (2007) conducted a cross sectional study with 581 high school and college athletes, and the purpose of this study was to test whether the perceived autonomy, competence, and relatedness mediated the relationship between autonomy-supportive coaching and athletes' motivation. The results showed that the three psychological needs had positive impacts on athletes' motivation. For instance, if athletes felt autonomous, competent, and senses of relatedness, they were more likely to be self-determined.

Holmberg and Sheridan (2013) also conducted a cross-sectional study to examine the relationship among the dimensions of athlete burnout and the degree of self-determination.

The study surveyed 598 NCAA Division I and III CAs, and intrinsic motivation was negatively correlated with burnout while amotivation was positively correlated with the dimensions of burnout (Holmberg & Sheridan, 2013). In other words, if a CA is self-determined, he/she may be less likely to experience burnout.

The most frequently used scale which is established based on SDT in sport is the Sport Motivation Scale (SMS). The details of the scale will be discussed in the next chapter. Readdy et al. (2014) conducted their research regarding CAs perceptions of an extrinsic reward program. They examined how football players' motivation is changed by an off-season extrinsic reward system for their mixed-method study (Readdy et al., 2014). Readdy et al. (2014) included SMS in their questionnaire packets to assess football motivation for their study. In this study, CAs from a Division I football team participated in a reward program called the Champions Club during the off-season. The program gives points to the participants based on various accomplishments, such as getting a good grade from classes and setting a personal record in the weights room. The participants completed survey questionnaires which include the SMS as one of the questionnaire packets at the begging and end of the Champions Club program. The results of the SMS showed that the extrinsic reward program had an impact on participants, as results showed statistically significant decreases in amotivation and extrinsic regulation, and statistically significant increases in intrinsic motivation (Readdy et al., 2014).

This study examined NCAA Division I, II, and III CAs' motivation in their dual role of athletics and academics. Among many existing motivational theories, the theoretical foundation of this study was SDT which was developed by Ryan and Deci (2000). To measure CAs' athletic motivation, the study used the Sport Motivation Scale-II (SMS-II;

Pelletier et al., 2013) which was established based on SDT, and the Academic Motivation Scale (AMS; Vallerand et al., 1992) was applied to measure CAs' academic motivation. The AMS was also established based on SDT. For the qualitative part of this study, the researcher examined how and why CAs are self-determined in both their athletic and academic roles based on NCAA divisions, as well as explore the transition processes of participants. Taylor and Ogilvie's (1994) model was used to guide the interviews regarding the transition process and plans.

CHAPTER III: METHODOLOGY AND METHODS

To examine Collegiate Athletes' (CAs) motivation toward their athletic and academic roles and to understand their transition plans, this study used a mixed method approach. Greene and colleagues (1989) defined mixed-method design as research which includes at least one quantitative method and one qualitative method. A couple years later, Tashakkori et al. (1998) defined mixed method as a combination of "qualitative and quantitative approaches in the methodology of a study" (p. ix). In general, research problems which one data source cannot sufficiently resolve the problems are suitable for a mixed method design (Creswell & Clark, 2017).

There are many ways to conduct mixed methods studies. This study used a mixed method sequential explanatory design in which a researcher collects data using a quantitative survey approach and follows up with a qualitative approach (Ivankova et al., 2006). This method was suitable to effectively measure CAs' motivation levels and differences among the NCAA divisions, and the follow-up qualitative study helped to explain the reasons behind and meaning of the results of the quantitative research (Creswell & Clark, 2017; Ivankova et al., 2006). In addition, this study explored CAs' transition plans through semi-structured interviews, as previous research and literature has shown a connection between athletic and academic identity and transition out of sport (Ivankova et al., 2006). For this particular study, using only a quantitative research design was not sufficient in understanding CAs' perceptions and thoughts on their motivation towards their dual role. Adding in a qualitative research design enhanced and assisted in eliminating this weakness by helping to effectively answer the research questions by providing deeper reasons and meaning behind the quantitative results.

In the first part of the study, two previously established survey instruments were used to collect data on CAs' athletic and academic motivation. To examine CAs' sport motivation, the Sport Motivation Scale-II (SMS-II; Pelletier et al., 1995; Pelletier et al., 2013) was used, and the Academic Motivation Scale (AMS; Vallerand et al., 1992) was used to assess CAs' academic motivation. Both SMS and AMS scales have been established based on Self Determination Theory (SDT). After conducting the first part of the study, the second part, qualitative research, explored the CAs' transition plans based on the results of the first part of the study using semi-structured in-depth interviews with participants who already participated in the quantitative study.

Phase 1

The first part of this study primarily focused on examining CAs' motivation towards academics and athletics. As established above, the data collection was conducted from each NCAA division. After collecting data from each division, a comparison among the three NCAA Divisions was conducted.

Participants

In order to fill a gap in the literature and create a comparison between NCAA divisions, participants from NCAA Division I, II, and III were used for this study. The NCAA population is comprised of approximately 460,000 CAs enrolled in 24 sports across three divisions (NCAA, 2018). Initially, the author expected to have at least 100 participants from each NCAA Division. Finally, 457 participants completed the survey, including 112 Division I CAs, 208 Division II CAs, and 137 Division III. During the quantitative part, 81 participants expressed their interest in participating in the qualitative part of the study. After reaching out to the potential participants who expressed their interest, 13 participants were

finally recruited and participated in the semi-structured interviews. The qualitative participants consisted of three Division I CAs, five Division II CAs, and five Division III CAs.

Participant Demographic Descriptions

The final participants for the quantitative part of this study were 457 current CAs. The participants' demographics were analyzed using Jamovi. It contains seven factors: gender, NCAA Division, playing year, sports, ethnicity, age, and academic class. The following tables explain the distribution of participants by the factors:

Table 4.1

Participant Distribution by Gender

Gender	N	%	Cumulative
Female	318	69.6	69.6
Male	134	29.3	98.9
Non-Binary	2	0.4	99.3
Prefer not to answer	3	0.7	100

As shown in Table 4.1, the author examined the gender of CAs. In terms of gender distribution, 318 participants (69.6%) of the participants identified as female, and 134 participants (29.3%) identified as male. There were two participants who expressed their gender as non-binary, and three participants did not want to answer the question.

Table 4.2

Participant Distribution by NCAA Division

NCAA Division	N	%	Cumulative
Division I	112	24.5	100
Division II	208	45.5	75.5
Division III	137	30	30

The table 4.2 shows participant distribution by NCAA Division. From 457 participants, Division I CAs were 112, Division II 208, and Division III 137. Division II CAs have the highest number (45.5 % of the total participants) from the three divisions.

Table 4.3

Participant Frequencies of Gender by NCAA Division

NCAA Division	Gender			
	Female	Male	Non-Binary	Prefer not to answer
Division I	93	19	0	0
Division II	132	73	2	1
Division III	93	42	0	2

The table 4.3 shows the participant frequencies of gender by NCAA Division. Since there were some gaps between females and males in terms of participants' numbers, the frequency was analyzed. From 457 participants, Division I CAs consisted of 93 females and 19 males, Division II included 132 females and 73 males, and Division III participants were 93 females and 42 males.

Table 4.4

Participant Distribution by Playing Years

Playing Years	N	%	Cumulative
11-15 Years	152	33.3	33.3
16-20 Years	97	21.2	54.5
21 Years	5	1.1	55.6
5 Years or Less	63	13.8	69.4
6-10 Years	140	30.6	100

From playing years, the highest number of participants were 11-15 years (n=152, 33.3 % of the total participants) followed by 6-10 years, 16-20 years, 5 years or less, and 21 years.

Table 4.5

Participant Distribution by Sports

Sports	N	%	Cumulative
Baseball	29	6.3	6.3
Basketball	42	9.2	15.5
Cross Country/Track & Field	74	16.2	31.7
Equestrian	15	3.3	35
Field Hockey	1	0.2	35.2
Football	7	1.5	36.8
Golf	42	9.2	46
Gymnastics	4	0.9	46.8
Ice Hockey	13	2.8	49.7
Lacrosse	16	3.5	53.2
Other (fill in below)	39	8.5	61.7
Soccer	52	11.4	73.1
Softball	17	3.7	76.8
Swimming & Diving	32	7	83.8
Tennis	15	3.3	87.1
Volleyball	49	10.7	97.8
Water Polo	10	2.2	100

From the total participants, cross country/track and field participants had the highest number (n=74, 16.2% of the total participants). The participants indicated a total of 16 sports, and 8.5% (n=39) played a sport other than the 16 sports listed above.

Table 4.6

Participant Distribution by Ethnicity

Ethnicity	N	%	Cumulative
African American	23	5	5
Asian / Asian American	16	3.5	8.5
Hispanic / Latinx	28	6.1	14.7
Other	4	0.9	15.5
Pacific Islander	2	0.4	16
Two or more	21	4.6	20.6
White / Caucasian	363	79.4	100

Regarding ethnicity, the majority of the participants were White Caucasian (n=363, 79.4% of the total participants), 28 (6.1%) participants identified their ethnic status as Hispanic / Latinx, 23 (5%) participants were African American, and 21 (4.6%) participants indicated that their ethnicity as two or more. There were minor numbers of participants with other ethnic backgrounds as well.

Table 4.7

Participant Distribution by Age

Age	N	%	Cumulative
18	77	16.8	16.8
19	115	25.2	42
20	96	21	63
21	92	20.1	83.2
22	56	12.3	95.4
23	14	3.1	98.5
24 and Over	7	1.5	100

The age breakdown of participants showed that participants who were 19 years old were the highest number (n=115) of the participants. Majority of the participants were between 18 and 23 years old (98.5%), and there were seven participants who were 24 and over.

Table 4.8

Participant Distribution by Academic Class

Academic Class	N	%	Cumulative
Freshman	138	30.2	30.2
Graduate	19	4.2	34.4
Junior	99	21.7	56
Redshirt Freshman	14	3.1	59.1
Redshirt Junior	11	2.4	61.5
Redshirt Senior	13	2.8	64.3
Redshirt Sophomore	11	2.4	66.7
Senior	69	15.1	81.8
Sophomore	83	18.2	100

The last demographic component is academic class. Freshman had the highest number of participants (n=138, 30.2%), followed by juniors (n=99, 21.7%), sophomores (n=83, 18.2%), and seniors (n=69, 15.1%), from the total participants. There were also many participants who were redshirt players during the data collection period.

Measure

A demographic questionnaire was included in the survey packet to attain participants' basic information such as age, ethnicity, division, sport, and grade point average (GPA). Next, the Sport Motivation Scale (SMS) which was established by Pelletier et al. (1995) has been widely used to determine athletes' motivation using a SDT perspective (Beaudoin, 2006; Readdy et al., 2014; Shaw et al., 2005) was used for this study. This scale was originally established in French and translated to English by the authors. The original and French version of SMS, 1'Echelle de Motivation vis-h-vis les Sports (EMS; Briere et al., 1995), was established based on the principles of Ryan and Deci's (2000) theory, SDT. The importance of conducting research on sport motivation was recognized at that time; however,

there were no existing instrument or scale which assessed the three elements of SDT, intrinsic motivation, extrinsic motivation, and amotivation toward sport (Briere et al., 1995). The French scale consists of seven subscales of four items per subscale, including the three different types of intrinsic motivation, three types of extrinsic motivation, and amotivation. Since the SMS was simply translated and validated into English from the EMS, the SMS also used the seven subscales to measure sport motivation.

Sport Motivation Scale. The SMS was validated in Canada to assess five types of behavioral regulations excluding integrated regulation (Pelletier et al., 1995). The scale consists of 28-item measures organized into 7 subscales; Intrinsic motivation to know, to accomplish, and to experience stimulation; identified regulation, introjected regulation, external regulation; amotivation. This scale has been very popular and widely used in the field of sport to measure sport motivation. Recently, researchers revised the SMS to address some limitations of the scale based on other researchers' comments (Pelletier et al., 2013). The researchers had questioned some of the items content and psychometric properties of the scale (Lonsdale et al., 2008; Mallett et al., 2007; Martens & Webber, 2002). The researchers suggested that the scale should include a measure of integrated regulation which is one of the regulations of extrinsic motivation in the SDT framework (Lonsdale et al.2008; Mallett et al., 2007; Martens & Webber, 2002).

Thus, Pelletier et al. (2013) reviewed the structure of the scale and validities of all the items, and they removed a couple of items and created some replacement items. The initial scale had a total of seven subscales, including three intrinsic regulation measures, three extrinsic regulation measures, and amotivation measure. The revised scale has a total of six subscales, including intrinsic measure, four extrinsic measures, and amotivation measure.

The four extrinsic measure consists of integrated, identified, introjected, and external measure. After revising the scale, they renamed the scale the SMS-II and examined the revised scale among Canadian athletes through multiple-studies. Through the studies, they found that the six-factor scale, including amotivation, external regulation, introjected regulation, identified regulation, integrated regulation, and intrinsic motivation has adequate internal reliability and construct validity (Pelletier et al., 2013).

The SMS-II (Pelletier et al., 2013) consists of a 6-dimension, 18-item scale based on SDT (Ryan & Deci, 2000). Using the primary question "Why do you play sports?" participants were asked to answer how strongly items measuring levels of intrinsic regulation (e.g., "because it gives me pleasure to learn more about my sport"), integrated regulation (e.g., "because participating in sport reflects the essence of who I am"), identified regulation (e.g., "because I have chosen this sport as a way to develop myself"), introjected regulation (e.g., "because I would feel bad about myself I did not take the time to do it"), external regulation (e.g., "because people I care about would be upset with me if I didn't"), and amotivated regulation (e.g., "so that others will praise me for what I do") corresponded with their personal experiences in sport using a 7-point Likert-type scale ranging from 1 (does not correspond at all) to 7 (corresponds exactly). Thus, the SMS-II was used to assess CAs' motivation towards athletics in this study.

Academic Motivation Scale. There have been very limited studies conducted in terms of CAs' academics using SDT perspective. Educators may have concerns on how to balance the use of extrinsic rewards to foster students' academics to be intrinsically motivated. As stated above, initially Stipek (1996) stated that students need extrinsic rewards to be realistic and desirable to be motivated on tasks. CAs face many challenges and quests

to perform their dual role successfully. Since they invest tremendous time in their athletics, they need the motivation to be successful academically so that they can prepare and think about life after sport or if an unexpected exit from sport occurs. To measure academic motivation, the Academic Motivation Scale (AMS) was used for this study (Vallerand et al., 1992). As with the SMS, the AMS has been also developed in French initially as the Echelle de Motivation en Education (EME) to measure motivation toward education (Vallerand et al., 1989). The EME was established based on the tenets of SDT, and it was translated to English and renamed as AMS (Vallerand et al., 1989).

Since this study aimed to examine CAs academic motivations, especially from a self-determination perspective, the 28 items AMS with 7 subscales which measures individuals' intrinsic, extrinsic, and amotivation towards academics was used. Each motivation consists of four items based on the questions, "Why do you go to college?". Using the question, participants were asked to answer how strongly items measuring levels of intrinsic motivation (e.g., "because I experience pleasure and satisfaction while learning new things"), intrinsic motivation toward accomplishment (e.g., "for the pleasure I experience while surpassing myself in my studies"), intrinsic motivation to experience stimulation (e.g., "for the intense feelings I experience when I am communicating my own ideas to others"), extrinsic motivation- identified (e.g., "because I think that a college education will help me better prepare for the career I have chosen"), extrinsic motivation-introjected (e.g., "because of the fact that when I succeed in college I feel important"), extrinsic motivation-external regulation (e.g., "in order to obtain a more prestigious job later on") and amotivation (e.g., "honestly, I don't know; I really feel that I am wasting my time in school") corresponded with their personal experiences in academics using a 7-point Likert-type scale ranging from 1

(does not correspond at all) to 7 (corresponds exactly). Thus, the AMS was used to assess CAs' motivation towards their academics.

Procedure

Prior to the data collection, approval for this research was obtained from the primary researcher's university's Institutional Review Board (IRB). The data collection was conducted fully online since it was not realistic to collect data in-person due to COVID-19.

Through all the institutions' official NCAA Division I, II, and III websites, all the staff members' (i.e., coaches, athletic directors, coordinators, academic advisors, etc.) contact information was manually gathered and stored on a Microsoft Excel file. Initially, a total of 82,850 coaches' contact information was collected, including NCAA Division, name of institution, athletic conference, name, position title, and email. The author extracted only coaches' information from all the staff members' contact information, which was 40,061emails. From the large numbers of emails, the author only used head coaches' information, as head coaches are primarily in charge of contacting their CAs, and some programs have only a head coach for its program without any assistant coaches, especially for non-revenue generating sports, NCAA Division III, and competitively small institutions. A total of 18,929 head coaches' emails were pulled from the list of 40,061 total coaches. Finally, a random sample of 5,000 was selected for this study. The author utilized the Microsoft Excel random selection macro to randomly select 5,000 head coaches from 18,929. After the email selection process, the author sent an invitation email to 500 coaches each day for ten days. Microsoft Outlook only allows people to send a maximum of 500 emails in 24 hours. Thus, the author sent 166 emails for Division I, 167 emails for Division II, and 167 emails for Division III institutions each day. The invitation email included a survey link

which was created using Opinio and asked the head coaches to invite their CAs to participate in this study.

The email included the researcher's information, the purpose of the study and details of the survey questionnaire. To increase the participation and return rates, the invitation email was sent during the CAs' academic semester. The potential participants who met the following criteria were accepted for the study: 1) Current CA who participates in NCAA athletics, 2) 18 years old or older, 3) Full-time student at a NCAA recognized university or college. To screen out CAs who do not meet the criteria, the demographic questionnaires asked questions regarding the criteria. In addition, the survey packet included a consent question regarding participation.

Data Analysis

The analysis began by comparing the three groups with varying levels of motivations regarding both their academic and athletic roles. One of the earlier steps to conduct data analysis is choosing what statistical software to use for the study. There are many programs which can analyze statistical data such as Statistical Package for the Social Sciences (SPSS), R, Mplus, and Jamovi. According to Muenchen (2012), IBM's SPSS Statistics program was the most preferred software in academic studies as of the end of 2018, and R was used half as much as SPSS in academic articles.

In this study, Jamovi was used to analyze the quantitative data set. Jamovi is a recently developed and free tool for academic research in social sciences (Şahin & Aybek, 2019). Jamovi is compatible with diverse data file formats such as csv, RData, dta, and sav. Also, Jamovi is capable of conducting various statistical test such as t-tests, ANOVA, ANCOVA, MANCOVA, linear and logistic regression, exploratory and confirmatory factor

analysis, and nonparametric tests (Şahin & Aybek, 2019). Since this study used only descriptive statistics and ANOVA for the quantitative part, all the data analysis was properly conducted with the software.

Descriptive statistics were conducted for the primary variables in the study. One-way analysis of variance (ANOVA) was conducted to find athletes' motivation differences among the NCAA divisions. ANOVA is a hypothesis testing procedure that examines the mean differences between two or more groups. After conducting the ANOVA, post-hoc comparisons (Tukey HSD) were used to specify the differences between the divisions. The reliability was tested via Cronbach's alpha to measure the internal consistency of the scale.

Phase 2

Qualitative research is a prudent methodology where research examines an unknown or under-researched phenomenon (Shaw & Hoeber, 2016). In general, qualitative research methods are used to explore and obtain a depth of understanding about research objectives from participants (Teddlie & Tashakkori, 2003). Since this part of the study seeks to identify CAs' perceptions towards their athletic and academic motivations, career readiness, and transition process and plans, a qualitative approach was beneficial for deeply exploring these topics further. This research is a mixed method study. After exploring CAs' motivational differences, the qualitative part of the study design allowed participants to express their in-depth thoughts on their motivation, career readiness and transition plan. In other words, this section of the study was used to further explore participants' transition plans after their athletic careers at their institutions.

Sampling

The qualitative approach to this study is designed to use semi-structured, in-depth interviews with CAs who completed the survey and who expressed interest in the interview follow-up. Four CAs from each division were recruited for interviews. The participants were recruited using a purposeful sampling method, as purposeful sampling has been widely used in qualitative research for the identification and selection of information rich cases related to the phenomenon of interest. The researcher included a question at the end of the survey for participants to list their contact information if they possessed an interest in completing a follow-up interview. From the participants who expressed their interest in conducting the interview, if there are more than four volunteers for each division, the author purposefully chose four participants for each division based on the following criteria: 1) All four participants play different sports, 2) All four participants are not one sex and ethnic background, 3) All four participants are not one academic class. Thus, a total of 13 CAs were recruited for participation in the qualitative part of this study.

Procedure

An interview protocol was established based on the SDT (Ryan & Deci, 2000), Conceptual Model of Adaptation to Retirement (Taylor et al., 2006), and the results from the quantitative analysis. All the interviews were recorded and transcribed. There were three steps of coding for this study. First, the transcribed data was coded through open coding to find as many categories as possible (Lindloff & Taylor, 2011). Open coding is the process of creating labels and developing categories based on meaning and dimensions (Khandkar, 2009). It is used to analyze qualitative data and is part of many qualitative data analysis methodologies (Khandkar, 2009). Second, axial coding was conducted to dive into the open

coded data more deeply searching for meaning, characteristics, and attribute dimensions (Saldaña, 2012). Finally, a priori coding was used to compare the NCAA divisions. In this study, the conflicts among the NCAA divisions were analyzed through this process. The coded data was thematically analyzed to produce meaningful information. A dimensionalization process was conducted to narrow the categories. Through the dimensionalization process, each category was examined to create its construct (Spiggle, 1994). Once the categories were solidified, themes were created.

After the coding process, the rigor and trustworthiness of the findings were confirmed using member checking and peer debriefing (Creswell & Miller, 2000). The summaries of results were sent to all the interview participants for member checking to ensure the accuracy of the transcriptions. They reviewed the findings and confirmed the consistency of the findings. For peer debriefing, the author used an external researcher who is an expert in both sport and qualitative research. The recruited expert reviewed the process of the study and the findings.

CHAPTER IV: RESULTS

This chapter presents the results of the study. Since this study used a sequential mixed method design, the results contain two separate parts: quantitative and qualitative. The quantitative results include the following detailed outcomes: (1) participants demographic description, (2) descriptive statistics, (3) reliability and validity tests, and (4) one-way analysis of variance.

The qualitative part includes the following details: (1) participant demographics, (2) credibility and trustworthiness, and (3) in-depth interview results.

Quantitative Study

Descriptive Statistics

The table 4.9 shows the descriptive statistics for the motivational variables. Sport Motivation Scale-II (SMS-II) contains six subscales; (1) intrinsic motivation, (2) integrated regulation, (3) identified regulation, (4) introjected regulation, (5) external regulation, and (6) amotivation. Intrinsic motivation had the highest mean score from the athletic motivation factors, and amotivation was the lowest.

Academic motivation Scale (AMS) contains seven subscales; (1) intrinsic motivation- to know, (2) intrinsic motivation- toward accomplishment, (3) intrinsic motivation- to experience, (4) extrinsic motivation- identified, (5) extrinsic motivation- introjected, (6) extrinsic motivation- external regulation, and (7) amotivation. Extrinsic motivation- identified was the highest mean score, and amotivation was the lowest from the academic motivation factors.

Table 4.9

Descriptive Statistics for Variables

Scale	Sub-scale	N	Mean	SD	Min	Max	Skewness	Kurtosis
SMS-II	Intrinsic Motivation	457	5.52	1.18	1	7	-0.958	0.689
	Integrated Regulation	457	5.27	1.29	1	7	-0.946	0.853
	Identified Regulation	457	5.49	1.25	1	7	-0.966	0.76
	Introjected Regulation	457	4.47	1.28	1	7	-0.257	-0.252
	External Regulation	457	2.78	1.37	1	7	0.767	0.0415
	Amotivation	457	2.53	1.27	1	6.33	0.923	0.289
AMS	Intrinsic Motivation - To Know	457	5.34	1.21	1	7	-0.724	0.265
	Intrinsic Motivation - Toward Accomplishment	457	4.74	1.44	1	7	-0.501	-0.231
	Intrinsic Motivation - To Experience Stimulation	457	3.47	1.45	1	7	0.308	-0.495
	Extrinsic Motivation-Identified	457	5.9	0.986	1	7	-1.53	3.65
	Extrinsic Motivation-Introjected	457	4.97	1.44	1	7	-0.673	-0.073
	Extrinsic Motivation-External Regulation	457	5.66	1.21	1	7	-1.05	0.916
	Amotivation	457	1.77	1.15	1	7	1.91	3.3

Reliability

This study used the Sport Motivation Scale-II (SMS-II) and Academic Motivation Scale (AMS) to assess CAs' athletic and academic motivations. To test both scales' reliability, Cronbach's alpha analysis was used, as it provides a measure of the internal reliability consistency of scales (Tavakol & Dennick, 2011). Most alpha coefficient for the variables ranged from .71 to .91 which is considered high reliability (Fraenkel & Wallen,

2011), except Sport Extrinsic Introjected Regulation and Sport Amotivation, which were 0.63 and .615. However, George and Mallery's (2019) guidelines indicated that < 0.60 may be questionable, but it does not mean unacceptable for reliability.

Table 4.10

Summary of Reliability Analysis for the Variables

Scale	Sub-scale	Cronbach's Alpha
SMS-II	Intrinsic Motivation	0.803
	Integrated Regulation	0.769
	Identified Regulation	0.846
	Introjected Regulation	0.63
	External Regulation	0.714
	Amotivation	0.615
AMS	Intrinsic Motivation- To Know	0.865
	Intrinsic Motivation- Toward Accomplishment	0.882
	Intrinsic Motivation- To Experience Stimulation	0.828
	Extrinsic Motivation- Identified	0.767
	Extrinsic Motivation- Introjected	0.853
	Extrinsic Motivation- External Regulation	0.799
	Amotivation	0.902

Validity

To test the construct validity of the factors, Confirmatory Factor Analysis (CFA) was applied for this study. CFA is used to test for a new or previously developed scale on a different sample. The sub-scales were replaced with their abbreviation due to the long length of the words. Table 4.11 showed the terminologies and abbreviations:

Table 4.11

Abbreviations for Sub-scales

Scale	Motivation Type	Sub-scales	Abbreviation
SMS-II	Intrinsic	Sport Intrinsic Motivation	SI
	Extrinsic	Sport Extrinsic Motivation Integrated Regulation	SEInte

		Sport Extrinsic Motivation Identified Regulation	SEIden
		Sport Extrinsic Motivation Introjected Regulation	SEIntro
		Sport External Regulation	SEEx
	Amotivation	Sport Amotivation	SA
		Academic Intrinsic Motivation - To Know	AITK
	Intrinsic	Academic Intrinsic Motivation - Toward Accomplishment	AITA
		Academic Intrinsic Motivation - To Experience Stimulation	AIES
AMS		Academic Extrinsic Motivation - Identified	AEID
	Extrinsic	Academic Extrinsic Motivation - Introjected	AEIT
		Academic Extrinsic Motivation - External Regulation	AEER
	Amotivation	Academic Amotivation	AAM

Sport Motivation Scale (SMS). The below path diagram showed how the factors are associated with each other. As drawn in the figure, all the subscales are associated with each other, and each subscale presented their own three variables.

Table 4.12

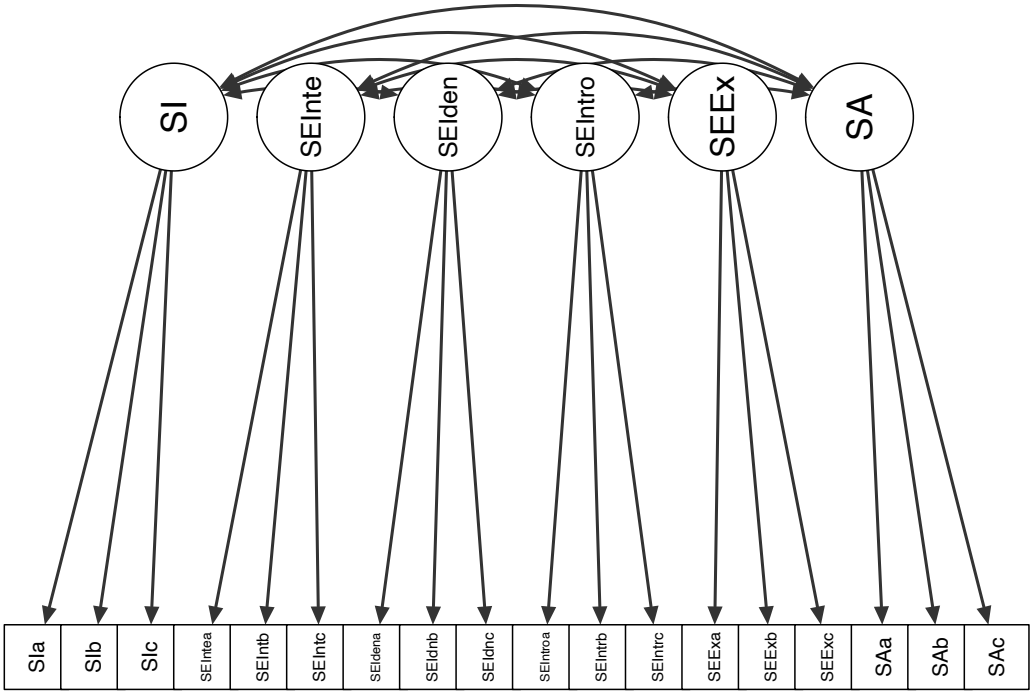
Sport Motivation Scale-II Model Fit

CFI	TLI	SRMR	RMSEA	RMSEA 90% CI	
				Lower	Upper
0.845	0.802	0.116	0.104	0.0964	0.111

To evaluate model fit, comparative fit index (CFI), Tucker-Lewis Index (TLI), Standardized Root Mean Square Residual (SRMR), and Root Means Square Error of Approximation (RMSEA) were examined. The following criteria were indicative of acceptable model fit: CFI > .90, TLI > .90, SRMR < .08, RMSEA < .08 (Hu & Bentler, 1999). The results showed poor fit.

Figure 4.1

Path Diagram for Athletic Motivation



Academic Motivation Scale (AMS): The path diagram for AMS also showed that all the subscales were associated with each other, and each subscale presented their four variables.

Table 4.13

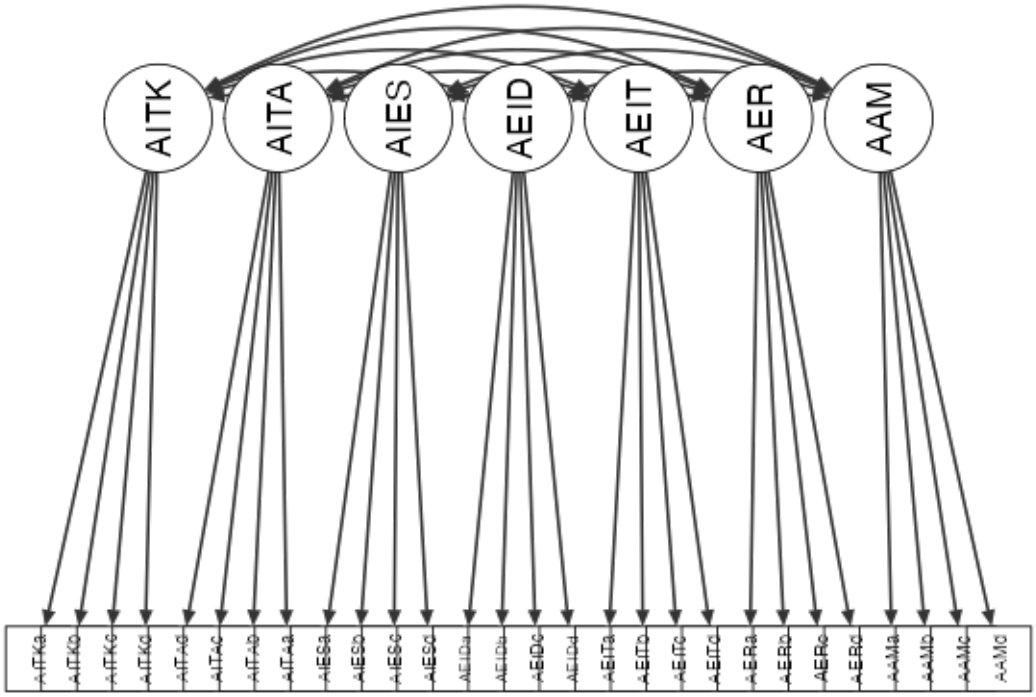
Academic Motivation Scale Model Fit

CFI	TLI	SRMR	RMSEA	RMSEA 90% CI	
				Lower	Upper
0.904	0.889	0.0675	0.0717	0.0671	0.0764

The results showed acceptable model fit for the scale based on Hu and Bentler's study (1999).

Figure 4.2

Path Diagram for Academic Motivation



One Way Analysis of Variance

There are a total of five research questions for this study. Among them, three research questions were examined using a quantitative approach. A one-way analysis of variance (ANOVA) was applied to test the three research questions.

RQ 1: What are the current CAs' athletic and academic motivational levels?

RQ 2: Are there statistically significant differences in motivation among the NCAA divisions in academics?

RQ 3: Are there statistically significant differences in motivation among the NCAA divisions in athletics?

Table 4.14

One-Way Analysis of Variance for Academic Motivation

Scale	Sub-Scale	NCAA Division	N	Mean	SD	SE	DF	DF2	F	P
AMS	AITK	D I	112	5.26	1.2	0.1136	2	454	6.89	0.001
		D II	208	5.17	1.25	0.0866				
		D III	137	5.56	1.09	0.0928				
	AITA	D I	112	4.82	1.42	0.1345	2	454	1.56	0.211
		D II	208	4.61	1.43	0.099				
		D III	137	4.87	1.45	0.1242				
	AIES	D I	112	3.43	1.49	0.1404	2	454	1.63	0.197
		D II	208	3.38	1.38	0.0958				
		D III	137	3.66	1.53	0.1307				
	AEID	D I	112	6.01	0.776	0.0733	2	454	4.23	0.015
		D II	208	5.75	1.178	0.0817				
		D III	137	6.04	0.769	0.0657				
	AEIT	D I	112	5.07	1.36	0.128	2	454	0.519	0.596
		D II	208	4.9	1.53	0.106				
		D III	137	4.98	1.37	0.117				
	AEER	D I	112	5.85	1.08	0.1021	2	454	1.9	0.151
		D II	208	5.58	1.36	0.0944				
		D III	137	5.64	1.04	0.0886				
	AAM	D I	112	1.83	1.13	0.1071	2	454	2.16	0.116
		D II	208	1.84	1.22	0.0844				
		D III	137	1.59	1.04	0.0892				

Table 4.14 showed the results of One-Way Analysis of Variance (ANOVA) for academic motivation based on the NCAA division. Among the seven sub-scales, Academic Intrinsic to Know (AITK) was the only factor statistically significant. To determine the significance of differences among the tested groups, Tukey's post-hoc test was used.

Table 4.15

Tukey Post-Hoc Test (AITK)

		Division I	Division II	Division II
Division I	Mean Differences	-		
	p-value	-		
Division II	Mean Differences	-0.0836	-	

	p-value	0.821	-	
Division III	Mean Differences	0.3911	0.475	-
	p-value	0.028	< .001	-

The results showed significant differences between Division I and Division III and Division II and Division III.

Table 4.16

Tukey Post-Hoc Test (AEID)

		Division I	Division II	Division II
Division I	Mean Differences	-		
	p-value	-		
Division II	Mean Differences	0.2576	-	
	p-value	0.065	-	
Division III	Mean Differences	-0.0326	-0.2902	-
	p-value	0.963	0.020	-

The results showed significant differences between Division II and Division III in terms of Academic Extrinsic Motivation Identified (AEID).

Table 4.17

One-Way Analysis of Variance for Athletic Motivation

Scale	Sub-Scale	NCAA Division	N	Mean	SD	SE	DF	DF2	F	P
SMS	SI	D I	112	5.54	1.19	0.1125	2	454	0.566	0.568
		D II	208	5.46	1.19	0.0826				
		D III	137	5.59	1.17	0.0999				
	SEInte	D I	112	5.55	1.22	0.115	2	255	3.97	0.02
		D II	208	5.22	1.18	0.0821				
		D III	137	5.12	1.45	0.1242				
	SEIden	D I	112	5.58	1.17	0.1108	2	454	1.24	0.289
		D II	208	5.39	1.22	0.0844				
		D III	137	5.58	1.37	0.1166				
	SEIntro	D I	112	4.49	1.22	0.1154	2	454	0.753	0.472
		D II	208	4.4	1.24	0.086				
		D III	137	4.57	1.4	0.1193				
	SEEx	D I	112	2.79	1.36	0.1285	2	454	0.0242	0.976

	D II	208	2.78	1.37	0.0947				
	D III	137	2.76	1.41	0.1202				
	D I	112	2.51	1.26	0.1191	2	454	0.213	0.808
SA	D II	208	2.58	1.27	0.0881				
	D III	137	2.49	1.29	0.1102				

Table 4.17 showed the results of One-Way Analysis of Variance (ANOVA) for athletic motivation based on the NCAA division. Among the sub-scales, only integrated regulation, which is the least extrinsic motivation, was statistically significant at a significance level of .05. Tukey's post-hoc test was used to examine which groups differed.

Table 4.18

Tukey Post-Hoc Test (SEInte)

		Division I	Division II	Division II
Division I	Mean Differences	-		
	p-value	-		
Division II	Mean Differences	-0.336	-	
	p-value	0.048	-	
Division III	Mean Differences	-0.437	-0.101	-
	p-value	0.028	0.776	-

The results showed significant differences between Division I and Division II and Division I and Division III.

Table 4.19

Descriptive for Athletic Motivation based on Gender

	Gender	N	Mean	Median	SD	SE
SI	Female	318	5.44	5.67	1.17	0.0659
	Male	134	5.70	6.00	1.19	0.1027
SEInte	Female	318	5.24	5.33	1.26	0.0705
	Male	134	5.38	5.67	1.33	0.1150
SEIden	Female	318	5.51	5.67	1.20	0.0675
	Male	134	5.49	5.67	1.34	0.1160
SEIntro	Female	318	4.56	4.67	1.20	0.0671
	Male	134	4.27	4.33	1.44	0.1247
SEEx	Female	318	2.88	2.67	1.36	0.0765

	Male	134	2.52	2.33	1.36	0.1177
SA	Female	318	2.60	2.33	1.30	0.0731
	Male	134	2.36	2.33	1.15	0.0991

Table 4.20

T-Test for Athletic Motivation based on Gender

	t statistic	df	p
SI	-2.143	450	0.033
SEInte	-1.013	450	0.312
SEIden	0.146	450	0.884
SEIntro	2.208	450	0.028
SEEx	2.559	450	0.011
SA	1.848	450	0.065

In addition to the divisional differences, this study examined motivational differences based on gender. However, due to the low number of participants who selected 'non-binary' and 'prefer not to answer', these two groups were removed from the analysis. Thus, 318 females and 134 males were analyzed to examine differences based on gender. The results showed that sport intrinsic motivation, sport extrinsic introjected regulation, and sport extrinsic regulation were statistically significant from the athletic motivation factors.

Table 4.21

Descriptive for Academic Motivation based on Gender

	Gender	N	Mean	Median	SD	SE
AITK	Female	318	5.47	5.75	1.100	0.0617
	Male	134	5.02	5.25	1.39	0.120
AITA	Female	318	4.95	5.00	1.315	0.0738
	Male	134	4.28	4.50	1.58	0.137
AIES	Female	318	3.55	3.50	1.407	0.0789
	Male	134	3.26	3.25	1.54	0.133
AEID	Female	318	6.01	6.00	0.874	0.0490
	Male	134	5.66	6.00	1.17	0.101
AEIT	Female	318	5.21	5.25	1.253	0.0703
	Male	134	4.42	4.50	1.68	0.145
AEER	Female	318	5.77	6.00	1.129	0.0633

	Male	134	5.46	5.75	1.34	0.116
AAM	Female	318	1.67	1.25	1.070	0.0600
	Male	134	1.96	1.50	1.27	0.110

Table 4.22

T-Test for Academic Motivation based on Gender

	t statistic	df	p
AITK	3.70	450	< .001
AITA	4.65	450	< .001
AIES	1.91	450	0.056
AEID	3.47	450	< .001
AEIT	5.53	450	< .001
AEER	2.54	450	0.012
AAM	-2.53	450	0.012

The results showed that most academic motivation factors were statistically significant. Females showed significantly higher on two of the academic intrinsic motivation factors and three extrinsic academic factors except for the academic intrinsic-to experience factor. On the other hand, male participants showed statistically higher academic amotivation.

Correlation Coefficients

The Pearson's Correlation coefficient was used to examine the relationship between athletic and academic motivations. The Pearson's Correlation assesses the relationship between two continuous variables. The results showed that many factors were significantly correlated to each other; for instance, the three intrinsic motivation factors for academics were highly and positively correlated to each other. Interestingly, the sport amotivation was highly correlated with sport extrinsic external regulation. In addition, sport intrinsic motivation was significantly correlated with the least sport extrinsic motivation factors: sport extrinsic motivation integrated regulation and identified regulation. Also, academic

Table 4.23

Pearson's Correlation Coefficients for Sub-scales

		SI	SEInte	SEIden	SEIntro	SEEx	SA	AITK	AITA	AIES	AEID	AEIT	AEER	AAM
SI	Pearson's r	-												
	p-value													
SEInte	Pearson's r	0.524	-											
	p-value	<.001												
SEIden	Pearson's r	0.64	0.599	-										
	p-value	<.001	<.001											
SEIntro	Pearson's r	0.244	0.496	0.369	-									
	p-value	<.001	<.001	<.001										
SEEx	Pearson's r	-0.25	0.031	-0.122	0.398	-								
	p-value	<.001	0.504	0.009	<.001									
SA	Pearson's r	-0.399	-0.199	-0.281	0.218	0.665	-							
	p-value	<.001	<.001	<.001	<.001	<.001								
AITK	Pearson's r	0.277	0.152	0.281	0.139	-0.033	-0.082	-						
	p-value	<.001	0.001	<.001	0.003	0.477	0.08							
AITA	Pearson's r	0.273	0.228	0.333	0.218	0.016	-0.004	0.772	-					
	p-value	<.001	<.001	<.001	<.001	0.737	0.931	<.001						
AIES	Pearson's r	0.178	0.085	0.168	0.16	0.079	0.068	0.628	0.629	-				
	p-value	<.001	0.069	<.001	<.001	0.09	0.146	<.001	<.001					
AEID	Pearson's r	0.123	0.22	0.144	0.167	0.011	-0.035	0.456	0.479	0.227	-			
	p-value	0.008	<.001	0.002	<.001	0.816	0.459	<.001	<.001	<.001				
AEIT	Pearson's r	0.19	0.285	0.259	0.316	0.206	0.126	0.482	0.688	0.421	0.461	-		
	p-value	<.001	<.001	<.001	<.001	<.001	0.007	<.001	<.001	<.001	<.001			
AEER	Pearson's r	0.058	0.221	0.134	0.279	0.189	0.071	0.131	0.206	0.028	0.602	0.371	-	
	p-value	0.216	<.001	0.004	<.001	<.001	0.129	0.005	<.001	0.555	<.001	<.001		
AAM	Pearson's r	-0.038	0.008	-0.06	0.123	0.243	0.388	-0.387	-0.279	-0.091	-0.406	-0.157	-0.113	-
	p-value	0.417	0.857	0.202	0.008	<.001	<.001	<.001	<.001	0.052	<.001	<.001	0.016	

amotivation was significantly correlated with sport amotivation. Furthermore, sport intrinsic motivation was negatively correlated with sport amotivation. Similar to the sport motivation, three academic intrinsic motivation factors are negatively correlated with academic amotivation.

Qualitative Study

After conducting the quantitative study, a qualitative study was conducted to explore CAs' in-depth thoughts related to their motivation and transition plans after college. An interview protocol was created to gain depth and understanding of the quantitative data before conducting interviews. Since the interview protocol was established based on the quantitative part and theoretical frameworks, the author reobtained Institutional Review Board (IRB) approval to confirm the interview protocol prior to the interviews.

Participants

A total of 13 participants who participated in the quantitative study completed the qualitative interviews for this study. The details of participants' interview are shown below:

Table 4.24

Qualitative Participant Demographics

Pseudonym	NCAA Division	Sport	Gender	Academic Class
Ava	Division I	Water Polo	Female	Redshirt Junior
Bailey	Division I	Rowing	Female	Sophomore
Brad	Division I	Track & Field	Male	Junior
Cathy	Division II	Swimming & Diving	Female	Senior
Denis	Division II	Track & Field	Female	Junior
Emily	Division II	Swimming & Diving	Female	Senior
Fred	Division II	Track & Field	Male	Freshman

Gwen	Division II	Soccer	Female	Freshman
Harry	Division III	Baseball	Male	Sophomore
Helen	Division III	Volleyball	Female	Freshman
Jen	Division III	Golf	Female	Sophomore
Kelsey	Division III	Track & Field	Female	Freshman
Lilly	Division III	Track & Field	Male	Senior

The participants consisted of three Division I CAs, five Division II CAs, and five Division III CAs. From the participants, nine CAs were female, and four CAs were male.

Findings

The qualitative part of this study was conducted using a three round coding process. Through the first round of coding, open coding process, a total of 66 codes were explored from the date set. Secondly, axial coding narrowed down the codes to nine meaningful categories. Finally, the apriori coding results in five distinct themes: 1) *Divisional Differences in Support & Resources, 2) Balancing the Dual Role of Athletics and Academics, 3) Self Determination Theory: Emphasis on the Components of Motivation, 4) Planning and Career Goals for Transition Out of Sport, and 5) Impact of COVID-19.* In the first theme, *divisional differences in support & resources*, the participants described what supports and resources are available for each division. Also, the participants discussed benefits they are getting as CAs, including scholarships and other financial benefits from their institutions. In the second theme, *balancing the dual role of athletics and academics*, the participants talked about their challenges, difficulties, and strategies for balancing academic and athletic roles. In addition, the participants talked about their emphasis on the roles and various experiences living as CAs. Based on the theoretical background, the participants talked about their motivational perspectives and emphasized the components of motivation in the third theme.

In the fourth theme, the participants expressed their thoughts and plans in terms of career goals and transition process out of sport. Since the study was started during the Covid-19 pandemic, many participants expressed their personal experiences and difficulties as CA for the final theme.

Divisional Differences in Support & Resources. One of the reasons that many CAs decide to play a sport in college is to receive benefits, including scholarships, gear, meals, and resources that are only provided to CAs. In general, Division I institutions have greater budgets and resources to operate athletic departments than Division II and III institutions. For instance, many Division I CAs are on scholarship, while almost all Division III CAs get only academic scholarships rather than athletic scholarships.

In this study, all three Division I participants were getting athletic scholarship and some other benefits from their athletic department (i.e., tuition, athletic support, nutrition, medical care, academic support, financial support). Even though Division I institutions compete at the same athletic level, there were gaps of supports for CAs based on the institutions' financial circumstances. For instance, Ava plays water polo for an institution which is financially stable, and she perceived that she received more benefits than other Division I participants. Ava said,

> I have a scholarship through athletics, I also have need based scholarship. Based on like my economic status and so that pretty much gives me everything I need to be able to be you know, a college athlete. Like tuition, and if you're living on campus housing, then that just gets put into a direct deposit account and then, not money you can spend on like food and housing, and like needs that you have for books. You know if there's resources for like mental health if you need to reach out to that, and

> then we also have our advisors, we have like a lot of support through different administrators and academic department I just haven't utilized.

One the other hand, Bailey who rows at a Division I school talked about very limited support for CAs from her athletic department. She said,

> We have to get used uniforms from the girls who have already graduated from us when they get new things with their names embroidered backpacks, embroidered jackets, like ski jackets, everything. Like this is shirt that i'm wearing right now, I have to return as I leave.

Even if there were gaps in resources, most Division I CAs expressed satisfaction regarding available resources they can utilize as CAs. Another Division I CA, Brad said,

> We have the academic center so when I was a freshman it was kind of a nice very quiet place and they've got free printing there, which is cool, you know when there's tutors and stuff in there and computers, if you don't own a computer.

In general, Division II institutions provide less supports than Division I institutions and better supports than Division III schools. Almost all the Division II participants were on athletic scholarships while Division III participants only got academic scholarships. Even though Division II CAs do not receive the same levels of support or have available resources as much as Division I CAs have, they have benefits and supports from their athletic department. Denis said,

> I do receive money for being an athlete so that's pretty cool. I'm also on to, I also have the lottery, so the state one but I'm also an academic scholarship as well. The university provides for like academics like tutoring, if I need to print things like the

> library, like all of that stuff they were very well, like you, guys have these resources, make sure you guys take advantage of them.

Another Division II CA, Emily, also described her benefits from athletics, and she emphasized how important her teammates and friends are. At the same time, she emphasized the benefits from athletics and determined they were essential in her decision to be a CA.

> I love all my friends and teammates that I've met through swimming so I can't say I wouldn't do it if I didn't have scholarships, but I don't think I would have started it without a scholarship.

Unlike Division I and II, Division III CAs mostly do not receive scholarships from athletics. Also, Division III CAs have the least available resources to support their academics in comparison with Division I and II CAs. Most Division III participants indicated that they got helps from professors regarding their academics. Harry said,

> All of our academic support comes from professors. You are just another student in the classroom and like there's no extra support everything at a division three, we don't have any, it's all on us.

Besides the academic supports, Division III institutions provide essential kits and gears for their CAs. Most Division III CAs recognized their limited support from athletics. Thus, Lilly, Division III track CA, mentioned that, "Because we're a Division III program so we don't get scholarships. I mean our coach gives everybody a free T shirt which is nice, but other than that. No, no, like money or anything like that" when she was asked about her benefits and supports from athletics.

Balancing the Dual Role of Athletics and Academics. Being a CA requires tremendous effort and accompanies difficulties because of their given circumstances. CAs

are obligated to manage their both academic and athletic roles to be successful. In general, Division I programs require more athletic activities than the other two Divisions. In consequence, Division I CAs must have an understanding and ability to navigate time management skills to perform in both roles. Ava said,

> I think the fact that our season end like halfway through spring quarter is really helpful because I can put most of my energy into water polo like in the winter and spring quarter and then, once season ends, I can just really focus on school.

Another Division I CA, Bailey, talked about her experiences regarding time management and difficulties in comparison with other non-athlete peers. She especially expressed mental and physical demands and toughness from being a CA. She said,

> All the time, I think my sport is really mentally and physically demanding, and so we condition, like every day, and when I was a freshman, we would have morning practices, and so my schedule with three hours of practice at 5 am like 5:45 to 8:45, and then we'd have an hour of weight, training, and then my day with a start, and that's when my college day would start, and I'd already been awake for like four and a half hours. Yeah, hours like working out so my body was already tired, and most of my peers were had just woken up for class. It's just a lot of like time management and like being able to push through like being exhausted beyond like your point. Being able to push through like those days, where like you're like oh my gosh I'm so tired, you're like I have to, and so it's just like I think it's a very mental it's a lot of mental strength, at least for me.

Unlike Division I participants, Division II participants showed more balance and structure in their role conflicts. One of the Division II participants, Emily, talked about how to focus on her dual role based on academic class. She said, Division II player, Emily said,

> I'm definitely like probably freshman and sophomore year I was very focused on academics, because I was so afraid that I was going to get behind or I was going to get bad grades, so I probably put a little more emphasis then versus when I was a junior senior and I had a more of a grasp on.

In comparison to the other NCAA Division participants, Division III participants expressed that they placed more emphasis on academics. Majority of the participants explained this reasoning due to monetary influences. Harry said,

> I think that the there's more of an emphasis on academics at division three just because, like I said no one's getting paid to play their sport. I also think another big difference is that, at least at my division three, and I assume most division threes being a student athlete just means that like when you go into the classroom you're just another student. Because it is nice that it is a division three school it's not division one where it's too much time being taken away from my academics so that's part.

Even though Division III CAs emphasized more on their academics, they also felt pressure related to time commitments from athletic activities. A Division III volleyball player, Helen, said that,

> I would say we there's a lot more time commitment and at the college level than high school, and we also lift like in high school, I never, we never did team lifts, but here we lift three times a week. This season with covid we haven't been playing games, but

> I know that when, in a normal season, we do have games there'll be even more of a time commitment.

Self Determination Theory: Emphasis on the Components of Motivation. Since all the CAs are responsible for both athletic and academic tasks to become a successful CA, motivation is one of the essential factors. The participants expressed their thoughts in terms of motivational perspectives on their dual role within athletics and academics. Based on the theoretical framework of this study, participants described why they attended college and played their sport as a CA. Although CAs receive a lot of beneficial services by their institutions, especially Division I CAs, they need a certain amount of motivation to conduct their dual role successfully. This motivation can be either intrinsic or extrinsic for both academic and athletic roles.

Academics. CAs may academically underperform due to various influences, including demographic background and motivational factors. However, the results of this study showed that majority of the participants including all three NCAA Divisions expressed an intrinsic motivation for academics. One of the ways to show their intrinsic academic motivation was the selection of their academic major. Ava, a Division I participant explained her intrinsic motivation towards academics stating how she selected her institution and major. Ava said,

> You're able to pursue the major that you want, and so I chose this university, primarily because the coaches said, you can be in mechanical engineering.

Another Division I player, Bailey, plans to transfer to another institution because her current university does not have the major she wants to study. She was intrinsically motivated in her academics, and she said,

> I want to transfer because they don't have the degree I want here. They don't have any degree, I'm not because of the school itself really it's just that they just don't have the degree, I want I've asked about it, what other degrees I could do, but they just don't lead me down the career path I want. So, my choices were student-athlete, not athlete-student. The student comes first before the athlete.

Cathy, a Division II player, also expressed a strong inherent interest in her academic major. She also showed her extrinsic motivation towards her academics, mentioning benefits regarding her career path. Cathy said,

> I love it a lot, it's great because I love my classes, and so I don't feel like it's a chore. I love what I study, I love it a lot and I know that whatever I do with it I'm going to be happy and proud. I really like aerospace inside, that was a good balance to do like mechanical engineering and then that kind of can apply to mechanical specific or aerospace specific or manufacturing. You know it's a little bit broader and so I felt like that kind of gave me a good baseline knowledge for being able to kind of get a variety of jobs, after graduation, and like be able to work in like an aerospace or similar field as well.

Almost all the Division III participants expressed stronger intrinsic motivation towards academics than the other Division participants. Mainly, they chose majors which are considered competitively strenuous than other majors. Kelsey said,

> I guess I like additional work in math because my teacher said that I had a talent. I just liked math ever since you know my teachers saw that there's something that I could, there's something that could be developed. I guess that passion towards math

> never left me, and I just want to keep going, and I want to stay in school and individually, I want to teach it to other college kids.

Another Division III participant, Lilly, expressed her passion for another academic major, history degree, which she is very interested in. She said,

> History it's always been my favorite subject in school, so I just wanted to continue doing that. Obviously, English is not a traditional route for Pre-Med, but I always liked English. I like bio more than I like chem, but that's kind of expected, and I like my English course a lot obviously as well.

One of the most common extrinsic motivations for CAs' academics is future career paths and opportunities. Division III participant, Helen, talked about her extrinsic motivation towards academics based on her future career path. She said,

> Unfortunately, I can't make a future out of volleyball, but I can make a future of whatever my academic career leads me so that's where the priority kind of comes in, just because, like you know i'm not going to go play professional volleyball, but I can get a career with my academics.

Another Division III participant, Kelsey, also highlighted her academic extrinsic motivation based on a job perspective. She said,

> Because they're what is going to carry me through my life and give me a job. And athletic part is it's like a hobby, though.

Athletics. The NCAA Division I institutions have the biggest budgets for their athletic programs and compete at the highest level. In general, Division I CAs have the highest possibility to become professional athletes or continue their athletic careers after

college. For this reason, many Division I participants showed a strong athletic motivation to be a professional athlete. One of the Division I participants, Brad said,

> Yeah, I mean when I follow some professional athletes and track, the dream is always to go the Olympics and stuff like that. That's a big motivation, you know it'd be really cool if I could just run professionally and that would make career that'd be awesome that sounds a lot better than sitting in an office all day.

One the other hand, another Division I participant expressed her athletic motivation to be healthier with some intrinsic motivational perspectives. Ava said,

> I love this sport so much, and I wanted to be like the best player on my team or the best that I could be at it and so that was enough for me, but also it's just different for everyone. I think I'm working out makes me feel like healthier and better and so it's just something that I wanted to continue doing even after high school ended in college and I'll probably keep playing water polo after college some way because I do love water polo and if I could continue I would. The best I can be every day and almost everything I can do, and so I think intrinsically motivated.

Even though they play a lower level than Division I CAs, Division II and III participants were very passionate and showed their love towards their respective sports. Most Division II participants were intrinsically motivated regarding playing their sport. Denis said,

> I didn't start pole vaulting until my senior year of high school. And that's what I had gotten recruited for, but once I started pole vaulting, I really just fell head over heels with it. So, we could throw away all the running parts of track and field, because that's gross but, when it comes to pole vaulting I've become really passionate about it.

Another Division II participant, Gwen, also showed her intrinsic motivation towards soccer and how much she loves the sport itself. She said,

> I just absolutely loved it like I just really, really love soccer and I like physical activity and sports in general I think they're so cool, so I was like just like just to do it is just amazing for me so it's like I guess that was my motivation, just like the love of the game, I guess.

One of the psychological needs of SDT is relatedness. Many participants mentioned their inherent interest in sport, and other participants also emphasized the importance of relatedness, people, and team during their college career. Emily distinctly expressed the importance of relatedness being on the team and playing sport. Even though her college career had ended, she still practiced and swam with her team. She said,

> I still love it, I mean, even though I'm a senior and technically swimming's over I still go and practice, just because I enjoy the activity and I enjoy doing it with the people.

Another Division II participant, Cathy, also mentioned her experience and thoughts on her college career regarding relatedness and connection. Cathy said,

> The times I'm swimming and stuff and more about the people that I'm getting to spend time with and the fact like remembering like how much I like the water and just like how just relax and like I feel when I get in the water. Yeah it's kind of like a second home to me, type of thing which sounds so cheesy, and I totally know it. But I mean I don't really know how else to describe it like it just feels so natural. Yeah, when I get in the water. And so I think that yeah it's more just like about like. Like yes, you, you get to work out and you like you have like coaches, who are supporting you and stuff but you also it gets fun and you get to see people that you. like that, like

> the same things as you and that you just really you really enjoy time with, and then you get to kind of just like work hard together, I think that that's something that's really cool about swimming.

Many collegiate athletes obtain benefits from their athletic activities, and Division I programs have more benefits and resources than the other two divisions. The benefits include scholarships, housing, meals, etc. Since tuition is very expensive for most students in the United States, the benefit of a scholarship can be a huge motivational factor to play sports in college for CAs. Being motivated due to some outside source is considered an extrinsic motivation. Even though Division I CAs compete at the highest level of athletics, since Division I programs provide more monetary benefits, Division I participants showed more extrinsic motivation to be a CA during the interviews. Division I CA, Brad, said,

> Always chasing scholarship money to make it more affordable to go to college. I mean, I would have stayed a student here so it's really expensive for me to be going to school like lucky my parents can help me with that, but some people don't have that luxury so I mean getting a scholarship is also a big reason why I'm on the team.

Another participant, Bailey, also talked about her motivation regarding her financial benefits. She said,

> Um so then it's motivated by scholarship because I couldn't go to where I couldn't go to this college without scholarship academic and athletic.

Even though Division III CAs spend an immense amount of effort to be a CA and conduct their dual role during the college career, many participants understood that they have a very limited possibility of being a professional athlete or continuing their career after college. Division III participants expressed their passion and intrinsic motivation towards athletics;

however, most of the Division III participants highlighted the value of academics for their lives. For instance, a Division III baseball player, Harry said,

> I love baseball, but I just think that there's a lot more to life than baseball and I know. Especially since I've gotten to college, like I realized that everybody's time playing sports comes to an end, whether it's in college or after high school. Or after like a 20-year professional career, like everybody's time comes to an end, eventually, then you have to have something else besides your sport to kind of put yourself worth and identity.

Another Division III participant, Jen, also echoed Harry's perspective. Jen recognized that her career would end after her college career, and she needed to play her sport as a hobby even though she really loves the sport. She said,

> I wanted to continue the competitive aspect and just to continue getting better and kind of take my game to the next level, and I could only do that if I could continue to play in college so. It's been a huge part of my life like playing competitive golf, but I know that, like I'll still probably do it as like a hobby. Like I won't completely like shut it off.

Interestingly, participants of Division II and Division III did not express their thoughts on extrinsic motivation on athletics.

Planning and Career Goals for Transition Out of Sport. Athletes' transition out of sport has become a very critical issue in the fields of sport management and sport psychology. Since collegiate athletes' transition out of college has a huge impact on their future, they are required to make prudent decisions during their college careers. If CAs have high academic performance and use support services during their collegiate careers, there is a

higher possibility of a successful transition process based on proper career goals and planning for after their collegiate athletic careers.

From this study, Division III participants showed more detailed transition and career plans for after their collegiate careers. Many Division III participants seem to know what they really wanted to do and the path of chasing their lives after college. A Division III Track and Field CA, Lilly, was interested in becoming a doctor and talked about why she wants to be a doctor. She said,

> I'm interested in orthopedic surgery. I really love the kidneys for some reason. When I studied anatomy, that was like my favorite part, and I think it's so cool how it all works.

She also emphasized the important role of academics to chase her career dreams. She said,

> It's my way of getting to where I want to be because if I don't focus on my academics, I'm not going to be going to medical school, I'm not going to be a doctor, I'm not going to do the things I wanted to do so, academics are important to me.

Division III CA, Helen, is also interested in entering medical school after her career. She specifically talked about why she chose a Division III school for her volleyball career. She said,

> Of the reason why I chose a division three school because, especially if I want to go Pre-Med, I know it takes a lot of time and energy, and I wanted to make sure that was my number one priority so. Like as much as much as I love volleyball and I do give 100% effort into it, I know that unfortunately I can't make a future out of volleyball, but I can make a future of whatever my academic career leads me so that's where the

> priority kind of comes in, just because, like you know I'm not going to go play professional volleyball.

On the other hand, Division I participants mostly showed uncertainty and ambiguity for their future after college. For instance, one of the Division I participants, Brad said,

> So, I'm not quite sure what I want to do I'm hoping that the internships I get this summer will kind of helped me discover like a more specific path.

Also, another Division I participant, Bailey expressed higher motivation to keep her college career as a CA and get an athletic-related job after college. She said,

> So, actually I've been offered a coaching position this summer and for the rest of the summers and I want to, I haven't told my coaches, but I want to transfer to another school to do rowing because they have kinesiology.

Like Division I participants, some Division II participants also showed less preparation plans for their transition and career after college. One of the Division II CAs, Emily mentioned,

> I don't know, I guess to hopefully find a career that I feel matters, like I really with my public health degree. I really just want to help people and make a difference in their life.

Even though some Division II participants showed uncertainty, some were motivated in athletics and planned to keep pursuing their athletic careers after college. One of the Division II participants, Gwen, said that she wants to keep competing as much as she can and would like to be a coach after her college career. She said,

> So I'm going to kind of continuing the little kind of like athletic round, I intend on doing if I can get into GA position and then from there, hopefully, an assistant position to finally a head coach position if I'm good enough.

Impact of COVID-19. The whole sport industry has been negatively affected by COVID-19 in a way that has never been experienced previously. CAs were also highly affected by this pandemic. Due to this unforeseeable circumstance, the NCAA has sanctioned a one-year extension of eligibility to CAs. This might be an appropriate response by the NCAA, but in reality, CAs had to undergo many difficulties, including self-training, and maintaining physical conditions for athletics during this unique time.

Division I CA, Brad explained the difficulty of being away from the facilities for training and his teammates,

> Me before the pandemic, it was just awesome like you can have free use of all the facilities, which is really nice, we have a really nice nutrition center here, so you can go get like food, I always get breakfast like we watch every morning it's free breakfast which is nice. Yeah, you could just kind of go in and work out whenever you want it's really easy to do that, we could do like team activities outside of practice which is awesome you know us like hang out and stuff. But now, with the pandemic I can't really do that, we like don't really have a lot of like team like hangouts or like team dinners or anything. This year it's just kind of you wear a mask and you're not really allowed to interact with anyone and there's really no spectators and obviously the budget's less this year so we're not really traveling anywhere super fun we're running these really little meets, which is less fun.

Gwen who is a Division II CA experienced and expressed other challenges while in the pandemic related to COVID-19 testing. She said,

> As athletes, we had to test every single week and then, if there was a game, we have to test like two to three times a week like right before the match right after the match and everything to make sure it was all safe.

Another Division II CA, Fred, discussed motivational changes between pre-pandemic and during-pandemic related to athletics. He said,

> I ran every day, well five days a week from March until July. And then the day that I found out that we didn't have a cross country season I just stopped for like two, three weeks. I just lost all motivation there and sort of the team everyone's like when I started talking to people that they said, like they were running and then the season got canceled and I was just like all right what's the point of running at this point.

Almost all the students were forced into online courses while the pandemic began, including CAs. CAs could only utilize minimal academic support by the athletic department during the pandemic because everything had been changed to remote services, such as zoom and email. Since CAs had been accustomed to receiving various privileges to support their academics by their institutions, most of the participants expressed that they were struggling with their academic loads during the pandemic. During the pandemic, all the participants, including all three divisions, expressed similar struggles and difficulties. They especially talked about extended timelines for communication, making it difficult to manage time and communicate. In addition, the participants explicitly expressed troubles experienced while taking online courses. One of the Division I participants, Brad said,

> Now we're in the first full year of online classes and I'm getting into my upper division stuff and my classes are getting pretty hard so it's just kind of, it's harder for me to learn and I don't get to know the professors as well, which is tough, because now I'm looking for jobs in the job market really competitive, because everything is remote. So that makes it really, really, tough because I'd have to schedule a meeting with them over zoom and it's not really the same. And then, some of my classes if it's

> something I'm struggling with it's really tough to get help because it's over zoom again, which is, I don't know it's like it's tough for me to get hands on work with them, you know, like if they were to teach me over zoom you'd be the exact same as I'm just teaching an online class because it's like it's not gonna be any different it's not going to help me in any way in which has made it tough. So much online classes are just go and wait and then talk about it in this kind of feels like I'm wasting a lot of time.

Another Division I participant, Bailey, also talked about her negative experience during the pandemic with members of her team getting sick. She said,

> I think half of our team gets covid we get shut down for the spring. Very crazy everything's turned upside down, basically, it's been about a year now.

Like the Division I participants, nearly all of the Division II participants expressed their challenges and difficulties in taking classes online rather than taking in-person classes. One of the Division II participants, Cathy said,

> I think that, because of COVID unfortunately it's become really difficult just because it is one of the harder degrees out there yeah um but normal, whenever I'm in person I love it. Yeah, COVID is hard I don't want to do any of my schoolwork. I can't sit there and stare at a computer screen for 14-16 hours a day.

Another Division II participant, Gwen, also talked about her difficult experiences during the pandemic. Also, she clearly indicated how Covid-19 negatively affected her academics. She said,

> As a bio kid I have to write lab reports and I have to send emails all day long and I'm in three-hour long classes like it's hard to do it online and like, I don't like it at all. No, absolutely not, I will tell you right now I went from being a 4.0 student to like a 1.6.

As the other divisions' participants experienced, Division III participants also expressed their challenging experiences during the pandemic, and they mainly talked about decreased motivations. Helen said,

> I find it's a little harder because a lot of my classes are on zoom. I think it's just a harder learning style for me but my grades are important to me, so I do make a priority of things sure I keep that GPA up even if it's a little more difficult. My motivation probably has decreased a little bit, but I think it's just been a struggle overall because the learning style is so different.

Another Division III participant, Jen, also briefly talked about her pandemic-related academic difficulties regarding a lack of motivation. She said, "I find it harder to focus when I'm like completely online just because there's like I'm not in the classroom setting." The pandemic was a sudden, uncommon situation for all the CAs, and primarily it negatively affected CAs both academically and athletically. As most participants described, Covid-19 caused communication and technical issues. Most importantly, Covid-19 negatively influenced CAs' motivation which may cause other problems such as the process of transitioning out of sport and into a new career path, especially given the remote work world they could be entering.

CHAPTER V. DISCUSSION

The purpose of this study was to examine collegiate athletes' (CAs) motivations regarding their dual role based on their NCAA division and explore their transition plans. Institutions including coaches and athletic departments should support their collegiate athletes to motivate them on both roles. Reynolds et al. (2012) indicated that CAs are required to be motivated both academically and athletically to achieve and maintain their athletic and sometimes academic benefits from their institutions. The results of this study found some critical aspects in terms of both CAs' motivation and transition perspectives based on the proposed theoretical background. Furthermore, this study examined and explored crucial findings based on NCAA divisions.

Conclusion

In this study, Chapter I focused on providing the purpose and rationale of the study with research questions. Also, the chapter discussed various factors that may influence CAs' motivation and transition plans, including background, lifestyle, demographics, etc. The Chapter II, Literature Review, laid out the important areas of the collegiate athletics field based on the purpose of this study. Also, two theoretical frameworks used for this study were summarized in this chapter. Self-Determination Theory (SDT) was used to examine academic and athletic motivations. Taylor and Ogilvie's (2006) 'Conceptual model of adaptation to career transition' was utilized to establish the interview protocol and guided the qualitative part of this study. The Chapter III of this study provided an in-depth discussion of the selected methodology, instrumentation, data collection and analysis procedures.

This study used a sequential mixed method design to examine CAs' academic and athletic motivations using a quantitative method, and a follow-up qualitative study that

explored participants' transition processes and in-depth thoughts on their motivational perspectives related to their dual role academically and athletically. The significance of this study was the usage of relevant mixed methods design for investigating both CAs' motivation in their dual role and transition plans through semi-structured interviews. The two instruments used for this study, Sport Motivation Scale (SMS) and Academic Motivation Scale (AMS), were appropriately used to examine the first three research questions out of five. The established interview protocol helped appropriately investigate the other research questions.

Theoretical Implications and Practical Implications

Consistent with the literature (Boyd, 2010), the findings of the study indicated that Division III CAs are more balanced between their dual role and spend more time considering and planning their education/major choices than other divisions. The quantitative results of this study showed that Division III CAs had significantly higher on one of the intrinsic academic motivation factors compared with the other two divisions. The qualitative study supported this finding as many Division III participants had plans to participate in their competitive sports until their collegiate careers ended but also had plans for life after sport. In contrast, Division I and II participants showed enthusiasm to keep playing and pursuing their sports after college.

During the qualitative study, most participants from all the three divisions showed inherent interest on academics, which is considered intrinsic motivation. However, since Division III participants have fewer possibilities of continuing their career after college, Division III CAs showed higher intrinsic academic motivation during the quantitative study. For this reason, they also described explicit academic goals and plans in terms of during and

after college than the other divisions from the qualitative part. In addition, the quantitative study did not show a significant difference among divisions in terms of extrinsic academic motivation. However, from the qualitative study, Division III CAs showed extrinsic academic motivation while the other two division CAs did not explicitly indicate their extrinsic motivation regarding academics. Being a Division III CA may have a higher possibility to contribute to preparation for a career after college better than the other divisions. For this reason, many Division III participants clearly expressed the importance of the transition process. Also, they firmly indicated that their sport would not support lives after college and recognized that academics would give them career opportunities.

Previous research has indicated that CAs often have lower academic motivation due to many factors including higher prioritization of their athletic role and athletic related activities (Adler & Adler, 1985). Previous studies (Boyd, 2010; Smith & Hardin, 2020) found that Division I CAs showed higher athletic identity than Division III CAs. As previously mentioned, however, less than 2% of CAs have opportunities to become professional athletes after their college careers (NCAA, 2018). Therefore, most participants in this study, including all three divisions, perceived that they had minimal chances to be professional athletes. Especially, Division III participants who had higher intrinsic motivation towards academics and expressed clearer transition plans out of college. In addition, Division III participants in this study seemed to recognize what they eventually wanted to do other than an athletic career after college sooner.

On the other hand, the results showed no significant differences in intrinsic athletic motivation based on NCAA Divisions. Division I CAs generally have more possibilities to be professional athletes, and they play in much better environments than the other two divisions.

However, all the three-division participants showed high intrinsic motivation in their sport. In general, Division I programs have higher demands of athletic-related activities, and Division I CAs rely on athletics more than the other division II and III participants. The qualitative results supported this quantitative result. Most Division III participants indicated that they play sport because they genuinely love the sport itself even though they do not get any benefits from playing sport. Division I and II participants also had an inherent interest in their sport and were intrinsically motivated.

CAs' athletic motivation can be influenced by their athletic identity. There have been various research outcomes regarding CAs' athletic identity focusing on divisional differences. For instance, Smith and Hardin (2020) conducted a qualitative study to explore Division I and III CAs' athletic identity. The results indicated that both Division I and III CAs showed high athletic identity. On the other hand, Griffith and Johnson (2002) conducted a study with track and field CAs, and the study found that Division III CAs showed higher levels of athletic identity than Division I CAs. Athletic identity may be varied by various factors such as kind of sport, academic class, academic major, and experience. Future studies in terms of finding a relationship between CAs' self-determination motivational perspectives and athletic identity are highly encouraged.

At the same time, Division I participants received more benefits than the other two divisions, such as scholarships, meals, etc. For this reason, Division I participants showed significantly higher motivations on one of the extrinsic motivation factors, Sport Extrinsic Motivation Integrated Regulation (SEInte). SEInte is the most autonomous regulation from the extrinsic motivation factors. People show this type of motivation when their behavior is valued and in harmony with their other goals and needs (Pelletier et al., 2013). Therefore,

CAs may consider their athletic benefits as extrinsic motivation related to achieving future goals in this study. This may happen because Division I CAs generally get more benefits than Division II and III CAs.

In addition, another exciting outcome has been examined in this study. To be consistent with multiple literature that measured academic motivation (Gaston-Gayles, 2005, Lee & Sten, 2017, Lupo et al., 2015), the results of this study showed significant differences in academics based on gender. The results indicated that six academic motivation factors out of seven showed significant differences between males and females. Female CAs showed higher scores on all the intrinsic and extrinsic motivation factors. On the other hand, male CAs showed higher amotivation related to academics than female CAs. Lee and Sten (2017) explained that female CAs might have higher academic motivation due to adopting positive academic habits from their friends and teammates. Another possible explanation for female CAs having higher academic motivation is that female CAs have less options to become professional athletes than male CAs after college. Even though both male and female CAs have very minimal possibilities of being professional athletes after college, men's sport has many more options than women. Thus, the lack of professional sport for women could be why female CAs rely on academics more than male CAs regarding their athletic transitions out of college.

Also, another result of this study showed that male participants had a statistically higher academic amotivation than their female counterparts. This result may be supported by previous studies that explored gender differences in motivational perspectives of CAs. Sherry and Zeller (2014) conducted a study with female Division I basketball CAs to explore their motivation. The research indicated that female CAs recognized the gender differences and

the social reception between male and female sports. Also, Sherry and Zeller's (2014) indicated that female CAs were highly concerned about getting injured during their career. In addition, previous studies have found that male CAs had a greater emphasis on athletic success than academic success (Diehl, 2009; Reynolds et al., 2012). As stated previously, female athletes focused on getting their degree and showed higher academic performance due to the lack of opportunities to become a professional athlete after their collegiate career (Reynolds et al., 2012). In general, male sports have a lot more professional sport infrastructures, which allow male CAs to continue their sport paths after college compared to female athletes. Also, according to Van Raale et al. (1992), male athletes possessed a significantly higher athletic identity than female athletes. For the reasons mentioned above, male CAs might show higher amotivation scores towards academics than female CAs in this study. Therefore, future research is highly recommended to find relationships among gender, athletic identity, and various motivational aspects.

The current study also found a relationship between athletic and academic motivation through the Person's Correlation coefficient analysis. Previously, many researchers (Gaston-Gayles, 2004; Simons et al., 1999) studied to see CAs' either academic or athletic motivation. Gaston-Gayles (2004) collected data from 236 Division I CAs and conducted a quantitative study to examine their academic and athletic motivation. Simons et al. (1999) examined Division I CAs academic motivation based on Self-Worth Theory. Simons et al. (1999) uniquely examined the correlation between academic and athletic roles. As the results showed, athletic intrinsic motivation was significantly correlated with academic intrinsic factors. For instance, if CAs, including all three divisions, have high athletic intrinsic motivation, they may also intrinsically be motivated for their academics. In addition, another

correlation result showed that if CAs are amotivated on academics, they are highly amotivated on athletics as well. Since other researchers have not previously examined these results, future studies regarding these results are highly recommended.

Implications and Future Research

The results of this study are expected to have significant impacts on various areas in the field of sport management and psychology, especially collegiate athletics. This study had a uniquely large number of participants who are currently competing for NCAA institutions at all the three divisions. Each NCAA division has different types and levels of support and environments pertaining to their CAs' academic and athletic roles and motivations. In this study, CAs' motivation based on NCAA divisions was examined and it was found that there were significant differences for some of the SDT dimensions. The results can be vital information to establish a better environment and support for CAs' well-being and life after their collegiate career. In addition, athletes' transition out of sport is one of the controversial and significant issues in the field of sport. This study can provide some guidelines on how CAs can prepare for their transition out of sport based on NCAA divisions. Based on circumstances like different time commitments for athletics and academic support, CAs may have different motivation perspectives and transition plans after their college career. Educators, administrators, and researchers may establish appropriate and adequate support systems for their CAs based on their situations.

In addition, this study can crucially contribute in terms of methodology because there have been very limited studies conducted regarding CAs' motivation and transition using a mixed-method design. This kind of study needs a mix-method approach because the research questions and problems cannot be appropriately answered using one methodological

approach. As discussed previously, the findings of this study can also provide various aspects regarding CAs' motivation and transition plans using the unique design.

Balancing motivation for CAs' dual role requires tremendous energy both mentally and physically. Each NCAA division has different environment and support for being a CA and successfully managing the dual role. In addition, transitioning out of a college career requires a challenging decision-making process and is a complex situation for CAs. Under this circumstance, many researchers have tried to provide relevant implications for practitioners who work with CAs. However, there may not be correct answers existing for these controversial issues. Despite this, researchers and educators can find better strategies and methods to lead CAs to the right or better directions by exploring their lived experiences.

Future researchers can conduct research projects using various well-established motivational theories and transition models to provide what other factors may influence CAs' motivation and transition processes. Therefore, it is important for future research to consider validating research tools on athletes' motivations and transitions to post sport careers. Also, very limited studies have been conducted using Division II and III institutions and CAs in comparison with Division I. To holistically make healthy environments for CAs, more studies regarding these two divisions should be conducted. Finally, this study was conducted during Covid-19, which was unexpected and unique. Future studies after the pandemic should continue to monitor and explore the impact of the pandemic on CAs in a post pandemic world.

The results of this study included vital information regarding CAs' motivation and their career transition. Since all the athletes will eventually retire from their sports, they will experience at least one or more transitional situations in their athletic lives. Thus, it is hoped

that this study will provide important information for people who are involved in college athletics, specifically, educators, coaches, administrators, and researchers, as well as fill a gap in the literature, as few studies have been conducted using DII and DIII CA populations, as well as there is a lack of research comparing all three NCAA divisions.

Limitation

This study contained some limitations. First, the participants did not represent all NCAA CAs. Many factors may influence CAs' motivation and transition processes, including NCAA division, institutions' financial situation, participants' demographic background, etc. Even though this study was randomly distributed to the target population of all the NCAA coaches, the participants of this study cannot represent all NCAA CAs. Second, there was a disparity in the number of responses from each Division. From the respondents of this study, Division II participants were 45.5 % of the total participants. After conducting CFA, the model fit was not desirable. Future studies are needed and recommended to establish a better scale to measure CAs' motivation, and questions should include examining differences based on NCAA division and other variables. Finally, Covid-19 could be one of the limitations of the study. The data collection of this study was conducted under pandemic circumstances. The respondents' mental and physical situation were not normal due to the unexpected and uncontrollable situation.

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APPENDICES

Appendix A: IRB Approval

OFFICE OF THE INSTITUTIONAL REVIEW BOARD

DATE:	January 22, 2021
IRB #:	00721
IRBNet ID & TITLE:	[1704578-1] Collegiate Athletes' Motivation Towards Dual Role and Career Transition Plan
PI OF RECORD:	Allison Smith
SUBMISSION TYPE:	New Project
BOARD DECISION:	APPROVED
EFFECTIVE DATE:	January 22, 2021
EXPIRATION DATE:	N/A
RISK LEVEL:	MINIMAL RISK
PROJECT STATUS:	ACTIVE - OPEN TO ENROLLMENT

DOCUMENTS:

- Advertisement - Email Script (UPDATED: 01/6/2021)
- Application Form - Project Information Form (UPDATED: 01/6/2021)
- Consent Form - Consent Form (UPDATED: 01/21/2021)
- CV/Resume - CV Smith (UPDATED: 01/6/2021)
- Other - Scientific Review Form (UPDATED: 01/6/2021)
- Other - Project Team Form (UPDATED: 01/6/2021)
- Protocol - Protocol (UPDATED: 01/21/2021)
- Questionnaire/Survey - Interview Protocol (UPDATED: 01/21/2021)
- Questionnaire/Survey - Dissertation Survey (UPDATED: 01/21/2021)
- Training/Certification - CITI Smith (UPDATED: 01/6/2021)
- Training/Certification - CITI Choi (UPDATED: 01/6/2021)

Thank you for your New Project submission. The UNM IRB has APPROVED your submission. This approval is based on an acceptable risk/benefit ratio and a project design wherein the risks to participants have been minimized. **This project is not covered by UNM's Federalwide Assurance (FWA) and will not receive federal funding.**

The IRB has determined the following:

- Informed consent must be obtained and documentation has been waived for this project. To obtain consent, use only approved consent document.

This determination applies only to the activities described in the submission and does not apply should any changes be made to this research. If changes are being considered, it is the responsibility of the Principal Investigator to submit an amendment to this project and receive IRB approval prior to implementing the changes. A change in the research may disqualify this research from the current review category. **If federal funding will be sought for this project, an amendment must be submitted so that the project can be reviewed under relevant federal regulations.**

All reportable events must be promptly reported to the UNM IRB, including: UNANTICIPATED PROBLEMS involving risks to participants or others, SERIOUS or UNEXPECTED adverse events, NONCOMPLIANCE issues, and participant COMPLAINTS.

If an expiration date is noted above, a continuing review or closure submission is due no later than 30 days before the expiration date. **It is the responsibility of the Principal Investigator to apply for continuing review or closure and receive approval for the duration of this project.** If the IRB approval for this project expires, all research related activities must stop and further action will be required by the IRB.

Please use the appropriate reporting forms and procedures to request amendments, continuing review, closure, and reporting of events for this project. Refer to the OIRB website for forms and guidance on submissions.

Please note that all IRB records must be retained for a minimum of three years after the closure of this project.

The Office of the IRB can be contacted through: mail at MSC02 1665, 1 University of New Mexico, Albuquerque, NM 87131-0001; phone at 505.277.2644; email at irbmaincampus@unm.edu; or in-person at 1805 Sigma Chi Rd. NE, Albuquerque, NM 87106. You can also visit the OIRB website at irb.unm.edu.

Appendix B: Survey Questionnaires

The following questions are meant to gather demographic information.

Q1: What is your gender?

1. Male
2. Female
3. Transgender
4. Non-Binary
5. Prefer not to answer
6. Other

If you have chosen "other", please specify: _____

Q2: What is your racial/ethnic identity?

1. White/Caucasian
2. African American
3. Asian/Asian American
4. Native American
5. Hispanic/Latinx
6. Pacific Islander
7. Two or more
8. Other

If you have chosen "other", please specify: _____

Q3: How old are you?

1. 18
2. 19
3. 20
4. 21
5. 22
6. 23
7. 24 and over

Q4: What is your academic classification?

1. Freshman
2. Redshirt Freshman
3. Sophomore
4. Redshirt Sophomore
5. Junior
6. Redshirt Junior
7. Senior
8. Redshirt Senior
9. Graduate

Q5: What is your NCAA Division?

1. Division I-FBS
2. Division I-FCS
3. Division I-No football
4. Division II
5. Division III

Q6: What is your major? _____

Q7: What collegiate sport do you play?

1. Football
2. Basketball
3. Soccer
4. Baseball
5. Softball
6. Cross Country/Track & Field

7. Volleyball
8. Water Polo
9. Swimming & Diving
10. Lacrosse
11. Field Hockey
12. Gymnastics
13. Ice Hockey
14. Golf
15. Tennis
16. Wrestling
17. Equestrian
18. Other (fill in below)

_____

Q8: How long have you been playing your sport?

1. 5 years or less
2. 6-10 years
3. 11-15 years
4. 16-20 years
5. 21 years or more

For the following questions please consider why you play your particular sport. You will select the rating that best corresponds with the statements considering your sport participation.

Sport Motivation Scale-II (SMS-II)
(Pelletier et al., 2013)

Q9: Because people around me reward me when I do.

1	2	3	4	5	6	7
(Not at all true)			Moderately true			(Exactly true)

Q10: Because it gives me pleasure to learn more about my sport.

1	2	3	4	5	6	7
(Not at all true)			Moderately true			(Exactly true)

Q11: Because I would feel bad about myself if I did not take the time to do it.

1	2	3	4	5	6	7
(Not at all true)			Moderately true			(Exactly true)

Q12: Because practicing sports reflects the essence of whom I am.

1	2	3	4	5	6	7
(Not at all true)			Moderately true			(Exactly true)

Q13: Because through sport, I am living in line with my deepest principles.

1	2	3	4	5	6	7
(Not at all true)			Moderately true			(Exactly true)

Q14: Because I think others would disapprove of me if I did not.

1	2	3	4	5	6	7
(Not at all true)			Moderately true			(Exactly true)

Q15: Because it is very interesting to learn how I can improve.

1	2	3	4	5	6	7
(Not at all true)			Moderately true			(Exactly true)

Q16: So that others will praise me for what I do.

1	2	3	4	5	6	7
(Not at all true)			Moderately true			(Exactly true)

Q17: Because I have chosen this sport as a way to develop myself.

1	2	3	4	5	6	7
(Not at all true)			Moderately true			(Exactly true)

Q18: It is not clear to me anymore; I don't really think my place is in sport.

1	2	3	4	5	6	7
(Not at all true)			Moderately true			(Exactly true)

Q19: Because it is one of the best ways I have chosen to develop other aspects of myself.

1	2	3	4	5	6	7
(Not at all true)			Moderately true			(Exactly true)

Q20: Because I feel better about myself when I do.

1	2	3	4	5	6	7
(Not at all true)			Moderately true			(Exactly true)

Q21: Because I find it enjoyable to discover new performance strategies.

1	2	3	4	5	6	7
(Not at all true)			Moderately true			(Exactly true)

Q22: Because I would not feel worthwhile if I did not.

1	2	3	4	5	6	7
(Not at all true)			Moderately true			(Exactly true)

Q23: Because participating in sport is an integral part of my life.

1	2	3	4	5	6	7
(Not at all true)			Moderately true			(Exactly true)

Q24: Because people I care about would be upset with me if I didn't.

1	2	3	4	5	6	7
(Not at all true)			Moderately true			(Exactly true)

Q25: Because I found it is a good way to develop aspects of myself that I value.

1	2	3	4	5	6	7
(Not at all true)			Moderately true			(Exactly true)

Q26: I used to have good reasons for doing sports, but now I am asking myself if I should continue.

1	2	3	4	5	6	7
(Not at all true)			Moderately true			(Exactly true)

For the following questions please consider why you go to college. You will select the rating that best corresponds with the statements considering your academic pursuit.

Academic Motivation Scale (AMS)
(Vallerand et al., 1992)

Q27: Because with only a high-school degree I would not find a high-paying job later on.

1	2	3	4	5	6	7
(Does not correspond at all)			Corresponds moderately			(Corresponds exactly)

Q28: Because I experience pleasure and satisfaction while learning new things.

1	2	3	4	5	6	7
(Does not correspond at all)			Corresponds moderately			(Corresponds exactly)

Q29: Because I think that a college education will help me better prepare for the career I have chosen.

1	2	3	4	5	6	7
(Does not correspond at all)			Corresponds moderately			(Corresponds exactly)

Q30: For the intense feelings I experience when I am communicating my own ideas to others.

1	2	3	4	5	6	7
(Does not correspond at all)			Corresponds moderately			(Corresponds exactly)

Q31: Honestly, I don't know; I really feel that I am wasting my time in school.

1	2	3	4	5	6	7
(Does not correspond at all)			Corresponds moderately			(Corresponds exactly)

Q32: For the pleasure I experience while surpassing myself in my studies.

1 2 3 4 5 6 7

(Does not correspond at all) Corresponds moderately (Corresponds exactly)

Q33: To prove to myself that I am capable of completing my college degree.

1 2 3 4 5 6 7

(Does not correspond at all) Corresponds moderately (Corresponds exactly)

Q34: In order to obtain a more prestigious job later on.

1 2 3 4 5 6 7

(Does not correspond at all) Corresponds moderately (Corresponds exactly)

Q35: For the pleasure I experience when I discover new things never seen before.

1 2 3 4 5 6 7

(Does not correspond at all) Corresponds moderately (Corresponds exactly)

Q36: Because eventually it will enable me to enter the job market in a field that I like.

1 2 3 4 5 6 7

(Does not correspond at all) Corresponds moderately (Corresponds exactly)

Q37: For the pleasure that I experience when I read interesting authors.

1 2 3 4 5 6 7

(Does not correspond at all) Corresponds moderately (Corresponds exactly)

Q38: I once had good reasons for going to college; however, now I wonder whether I should continue.

1 2 3 4 5 6 7

(Does not correspond at all) Corresponds moderately (Corresponds exactly)

Q39: For the pleasure that I experience while I am surpassing myself in one of my personal accomplishments.

1 2 3 4 5 6 7

(Does not correspond at all) Corresponds moderately (Corresponds exactly)

Q40: Because of the fact that when I succeed in college I feel important.

1 2 3 4 5 6 7

(Does not correspond at all) Corresponds moderately (Corresponds exactly)

Q41: Because I want to have "the good life" later on.

1 2 3 4 5 6 7

(Does not correspond at all) Corresponds moderately (Corresponds exactly)

Q42: For the pleasure that I experience in broadening my knowledge about subjects which appeal to me.

1 2 3 4 5 6 7
(Does not correspond at all) Corresponds moderately (Corresponds exactly)

Q43: Because this will help me make a better choice regarding my career orientation.

1 2 3 4 5 6 7
(Does not correspond at all) Corresponds moderately (Corresponds exactly)

Q44: For the pleasure that I experience when I feel completely absorbed by what certain authors have written.

1 2 3 4 5 6 7
(Does not correspond at all) Corresponds moderately (Corresponds exactly)

Q45: I can't see why I go to college and frankly, I couldn't care less.

1 2 3 4 5 6 7
(Does not correspond at all) Corresponds moderately (Corresponds exactly)

Q46: For the satisfaction I feel when I am in the process of accomplishing difficult academic activities.

1 2 3 4 5 6 7
(Does not correspond at all) Corresponds moderately (Corresponds exactly)

Q47: To show myself that I am an intelligent person.

1 2 3 4 5 6 7
(Does not correspond at all) Corresponds moderately (Corresponds exactly)

Q48: In order to have a better salary later on.

1 2 3 4 5 6 7
(Does not correspond at all) Corresponds moderately (Corresponds exactly)

Q49: Because my studies allow me to continue to learn about many things that interest me.

1 2 3 4 5 6 7
(Does not correspond at all) Corresponds moderately (Corresponds exactly)

Q50: Because I believe that a few additional years of education will improve my competence as a worker.

1 2 3 4 5 6 7
(Does not correspond at all) Corresponds moderately (Corresponds exactly)

Q51: For the "high" feeling that I experience while reading about various interesting subjects.

1 2 3 4 5 6 7

(Does not correspond at all) Corresponds moderately (Corresponds exactly)

Q52: I don't know; I can't understand what I am doing in school.

1 2 3 4 5 6 7

(Does not correspond at all) Corresponds moderately (Corresponds exactly)

Q53: Because college allows me to experience a personal satisfaction in my quest for excellence in my studies.

1 2 3 4 5 6 7

(Does not correspond at all) Corresponds moderately (Corresponds exactly)

Q54: Because I want to show myself that I can succeed in my studies.

1 2 3 4 5 6 7

(Does not correspond at all) Corresponds moderately (Corresponds exactly)

Q55: Are you interested in participating in a follow-up phone interview on these topics? If so, please provide the best email to reach you in the text box provided. NOTE. Your email address will remain confidential and not be used for any means beyond this study.

Email Address: _____

Appendix C: Interview Protocol

I really appreciate your participation in this qualitative study. If you have any questions (or other questions) arise at any point in this study, you can feel free to ask them at any time. I would be more than happy to answer your questions. You may also choose to skip questions or stop the interview at any time.

Introductory questions

1. Please briefly introduce yourself to get to know you.
2. What were your original motivations for getting into sports? Do you have individuals who influenced you? If so, who and how?
3. How long have you been playing your sports?

Collegiate athletes' questions:

4. What was the experience of coming to college like?
5. What was difficult or easy about this experience? What obstacles/barriers existed to this initial transition into college?
    A. If you none, why do you think that is?

Academic resources questions:

6. How did you choose your major?
    A. Did your coaches or athletic department give you any information or help you when you chose your major?
7. How to you choose your major?
    A. For academics, do you like your major?
        i. If yes, what do you like the most?
        ii. If not, why do you study the subject?
8. Are you getting academic support from the athletic department? What does this support look like?
    A. How do they help?
    B. How often do you meet with your academic advisor?
9. What kind of resources do you have to assist you with academics outside of athletics?
    A. Do you use these services?
    B. How often?
    C. Do you find them helpful?
        i. If so, why? If not, why not?
10. Do the resources help you keep you eligible (i.e., GPA and academics)? Or you need to more support?
    A. If you need more support, what do you need? Any suggestion?

Motivation questions (SDT)

11. What does "Sport" mean to you?
    A. What is your motivation to play your sport at your institution?
    B. What do you like the most about playing your sport for your school?
12. What does "Academics" mean to you?
    A. Why did you school to attend your college/university?
    B. What do you like the most on attending school?
13. Do you think there are differences on academic and athletic motivations based on NCAA divisions?
    A. If yes, why
    B. If not, why?
14. The results showed that there was no difference on sport motivation based on Division. In general, D I students have more possibilities to be a professional athlete or going to higher levels. However, D II and III athletes in this study were motivated as much as D I athletes in regard to their sport motivation. What are your thoughts on why this is?
15. If you played for a different NCAA division do you feel your athletic motivation would change? How so? Why?
16. Why do you think DIII students are more intrinsically motivational on academics?
17. Why do you think DIII students are more extrinsically motivational on academics than D II?

Transition questions

18. What is the most difficult situation you have experienced before you become a student athlete? And now?
    A. How did you handle this situation?
    B. Who and what have helped you when you face the difficulties?
    C. What was the most helpful?
19. Have you thought about leaving your sport; (retirement)?
    A. Have you taken steps to prepare for this transition?
        i. If so, Why?
        ii. What steps have you taken?
        iii. What resources have you used to prepare for this next step?
        iv. If you have not, why not?
20. What do you want to do after college? What is your future career path?
21. What is your ultimate goal as an athlete or other position?
22. Do you have other plans for your life?
23. What do you do for the other plans (Certificate / degree / books)?

Closing

1. If you were going to give advice to incoming student athletes, what would you say?
2. Anything else you want to talk or add? Or you felt we missed discussing?

Thank you for your time and participation in this project!

VITA

Jeongwon Choi is originally from Busan, South Korea. He attended Korea Maritime and Ocean University from 2005-2011 graduating with a B.S. degree in Ocean Physical Education in February 2011. In 2011, he entered a master's degree program in MBA in Sport Administration at St. Thomas University, graduating in December of 2012. After earning his master's degree, he held several positions in sport marketing agencies, with a professional team, and within collegiate athletics. His research is in the area of intercollegiate athletics with a focus on the practical application of exposing various issues in sport and creating change for student-athlete welfare. Specifically, he explores the transition process of collegiate athletes and their motivation for academics and athletics. Upon graduation in July 2022, Jeongwon Choi will receive a doctorate in Philosophy in Physical Education, Sports & Exercise Science.