

NCAA TRANSFER STUDENT-ATHLETES, ATHLETIC IDENTITY, AND THE
IMPACT OF COVID-19

by

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ABSTRACT

MARK EDWARD VERBURG. NCAA Transfer Student-athletes, Athletic Identity, and the Impact of COVID-19
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Transfer students are an increasingly important piece of the college athletics puzzle; however, little is known about the athletic identity of this important population and the effects of COVID on their commitment to sport. The purpose of this study was to measure and compare the athletic identity levels of NCAA student-athletes who transferred to their current institutions versus the athletic identity levels of fellow student-athletes who did not transfer. Additionally, the study sought to explore relationships between athletic identity and a student-athlete's view of the personal impact of the COVID-19 pandemic. The sample included 413 student-athletes from all three NCAA divisions and a variety of transfer situations. Noteworthy findings include: student-athletes who transfer are likely to have a higher athletic identity than those who have not transferred, student-athlete's strength of commitment to their sport during the pandemic influenced their athletic identity scores, and student-athletes who had negative academic experiences exhibited higher athletic identity scores. Considering the increasing prevalence of transfer student athletes, these findings will inform athletic personnel from administrators to coaches to academic advisors about the transfer population and the influence of the pandemic on student-athletes. Recommendations include: intentionally discussing the concept of athletic identity with student-athletes throughout their collegiate careers, encouraging student-athletes to develop multiple roles or identities outside of sport, and understand that the pandemic impacted student-athletes in a multitude of ways including influencing how they viewed the role of sport in their lives.

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DEDICATION

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CHAPTER 1: INTRODUCTION

Introduction

Prior to the NCAA's 2021 change to allow men's basketball student-athletes to transfer and play immediately (Dellenger, 2021; NCAA, 2021a), forty percent of all men's basketball student-athletes who entered a Division I school as first-year students (freshmen) transferred by the end of their second year (NCAA, n.d.-a). While not every sport at every level of the National Collegiate Athletic Association (NCAA) experiences this volume of transfers, the transfer student-athlete population is significant and growing. Thirteen percent of all NCAA Division I student-athletes were transfers in 2018-19 and this number has increased each of the last three years (NCAA, 2020a). The transfer number climbs to 21.4% for men and 14% of women at the Division II level (NCAA, 2020b). College students transferring from institution to institution is not uncommon as the transfer rate among first-time students from the fall 2011 cohort was 38% per the National Student Clearinghouse Research Center (Shapiro et al., 2018). Therefore, intercollegiate varsity student-athletes competing at all levels of the NCAA are not unlike their peers in their desire and willingness to transfer. Additionally, new transfer legislation ratified April 28, 2021 and effective for the 2021-2022 academic year allows all NCAA Division I student-athletes the ability to transfer and play immediately at their new school assuming they meet the academic requirements (Dellenger, 2021; NCAA, 2021). This change will undoubtedly lead to even more student-athletes who transfer as they will be able to play their sport immediately at the new institution without penalty.

The NCAA is the premier intercollegiate athletic association in the United States

encompassing over 1,100 colleges and universities in three distinct divisions with nearly 500,000 student-athletes competing annually (NCAA, n.d.-b). The NCAA's divisions include Division I (split for football playing members between the larger Football Bowl Subdivision [FBS] programs and the typically smaller Football Championship Subdivision [FCS]), Division II, and Division III (NCAA, n.d.-c, n.d.-d, 2007, 2019). Distinct differences exist between the divisions in terms of finances/budgets, athletic scholarships available, perceived athletic ability of the student-athletes, the potential to play professionally, the athletic time commitment required, and the scope of specialized student-athlete services among others (NCAA, n.d.-c, n.d.-d, 2007, 2019, 2020c). Additionally, included in the transfer data are student-athletes from community and junior colleges who move on to universities to continue their academic and athletic careers.

This study focused on the transfer student-athlete population, their individual self-perceived identities as athletes and the potential influence of the pandemic on their athletic identities. High athletic identity levels have been associated with positive and negative outcomes and can be seen in amateur and professional athletes at all levels. High athletic identity levels of intercollegiate student-athletes have been shown to influence academic major selection (Foster & Huml, 2017), likelihood of the use of academic resources (Antshel et al., 2016), a lack of career development (Houle & Kluck, 2015; Linnemeyer & Brown, 2010; Murphy et al., 1996), and can adversely impact the transition out of sport upon injury, graduation, or retirement (Webb et al., 1998). Brewer and Cornelius (2001) developed the 7-item Athletic Identity Measurement Scale (AIMS) as a means to quantify an athlete's identity and this instrument will be used in this study.

The survey includes Likert scale questions as “I consider myself an athlete” and “sport is the most important part of my life” and “I feel bad about myself when I do poorly in sport.”

In a recent study on a university that moved their athletic department from Division II to Division I, Kissinger et al. (2015) note that when schools made the move up, it influenced “how student-athletes see themselves” (p. 2). The present study sought to determine if the decision to transfer was associated with a higher athletic identity level when compared to student-athletes who do not transfer. Cutler (1994) found a correlation between self-esteem and high athletic role identity levels in that those who exhibit high athletic identities tie their sense of self to their sport and when an ascension or promotion within sport is not realized self-esteem suffers. Therefore, there potentially is a difference in the athletic identity levels of NCAA student-athletes who transfer and those who choose to remain at their original institution.

Additionally, the study explored whether a relationship exists between athletic identity and the COVID-19 pandemic. Little is known about the short-term and long-term effects of the global pandemic that impacted all aspects of life including intercollegiate athletics from March 2020 until 2022. The results of the study will be useful in gaining a greater understanding of the transfer student-athlete population, the short-term impacts of COVID on athletic identity, give insight to student-athlete support personnel, and give greater awareness to the types of student-athletes who might have trouble transitioning out of athletics and into the workforce.

Purpose

The purpose of this study was to measure and compare the athletic identity levels

of NCAA student-athletes who transferred to their current institutions versus the athletic identity levels of fellow student-athletes who did not transfer (native students).

Additionally, the study sought to discover a relationship between the impact of the COVID-19 pandemic on student-athletes' commitment to sport. The sample included student-athletes at all three NCAA divisions and from a variety of transfer situations. There are a multitude of transfer types including transfers moving from community colleges to universities, transfers moving from one university to another university, transfer student-athletes who attend three or more institutions, etc. The results of this study could inform athletic administrators, coaches, academic advisors, and student-athlete development professionals of what to expect of the distinct transfer student-athlete population and encourage intentional planning of programming and initiatives with athletic identity in mind. The results also will provide an early data point to assess the impact of COVID-19 on varsity student-athletes' athletic identity.

Research Questions

The following research questions guide this study:

RQ1: Is there a relationship between the impact of COVID-19 on commitment to sport and athletic identity? If so, is it moderated by transfer status?

RQ2: Is there a significant difference in the athletic identity levels (per AIMS score) of student-athletes based on transfer status (transfer or native), current NCAA division, and various demographic variables?

RQ3: Is there a significant difference in the athletic identity levels (per AIMS score) of transfer student-athletes based on their transfer type (2-4 or 4-4) and various demographic variables?

Theoretical Framework

The concepts of identity and athletic identity underpin the study. The broad idea of identity is defined by multiple scholars including Erikson (1959), Mead (1934/2015), and Chickering (1969). Additionally, identity theory is discussed as it addresses the importance of social groups and role behavior (Hogg et al., 1995; Serpe, 1987; Stryker, 1968). Finally, athletic identity is defined and explained in relation to student-athlete behaviors and circumstances (Brewer et al., 1993).

Identity

The concept of identity is critical to higher education and student development. Erikson (1959) established that identity is a personal self-concept based on an individual's view of themselves, which also involves a parallel observation of others' recognition of the individual. Likewise, Chickering (1969) observed that assessing and valuing how one is seen by others is the basis for identity formation and is an important factor of adolescent development. Hogg et al. (1995) describes identity theory as "a microsociological theory that sets out to explain individuals' role-related behaviors" (p. 255). Additionally, identity theory explains the prominent role social groups play in developing specific role identities in an individual (Hogg et al., 1995; Stryker, 1968). Furthermore, a hierarchy of roles develops within an individual and the highest ranked role often dictates responses to various conditions (Serpe, 1987). College students often identify with multiple identities or roles based on a variety of factors. Each of these roles or identities plays a part in determining behavior.

Athletic identity

Collegiate student-athletes have the additional complex role of athlete. Brewer et al. (1993) first defined athletic identity as “the degree to which an individual identifies with the athlete role, within the framework of a multidimensional self-concept” (p. 237). Positive and negative outcomes of high athletic identity levels have been found for athletes at all levels. Positive outcomes of high athletic identity include better athletic performance (Horton & Mack, 2000), increased physical activity and sports team participation for children and adolescents (Anderson et al., 2009), and improved social development among athletes which strengthen the commitment to sport (Horton & Mack, 2000). The negative outcomes of high athletic identity often garner greater attention and include, among others, an inverse relationship with the student role (Adler & Adler, 1991; Beron & Piquero, 2016; Miller & Kerr, 2003), a hyper-focus on the athlete role at the exclusion of other roles leading to identity foreclosure (Beamon, 2012; Brewer & Petitpas, 2017), lower career maturity levels (Brown et al., 2000; Linnemeyer & Brown, 2010; Tyrance et al., 2013), reduced career development (Albion & Fogarty, 2005; Grove et al., 1997), and creates difficulty working through athletic retirement (Alfermann et al., 2004; Baillie & Danish, 1992; Cutler, 1994; Lally, 2007).

Overview of Research Methodology

The research design of this study was quantitative, descriptive, and non-experimental. The dependent variable (AIMS score) results in a quantifiable number for statistical analyses using General Linear Model (GLM) – Univariate. The analysis sought to identify a potential statistical relationship between the dependent variable and multiple independent variables most notably transfer status and a student’s commitment to sport during spring 2022 COVID-19 pandemic. Though the methods proposed in this study

cannot prove a direct cause and effect relationship, relationships can be determined. The study was descriptive in nature as multiple variables were collected to give richer insight into this unique population.

In concert with extensive previous research in this area, the 7-item AIMS instrument was used in addition to demographic questions and two questions which attempt to assess the impact of COVID-19 on athletic identity. Brewer et al. (1993) first introduced a 10-item scale to measure athletic identity that included a Likert scale ranging from 1-7 for a maximum score of 70. In 2001, Brewer and Cornelius reduced the AIMS survey to a 7-item instrument (maximum score of 49) with questions falling into three subsections: social identity, exclusivity, and negative affectivity. AIMS has been used in a multitude of studies from determining athletic identity by sport level and cultural popularity (Rasquinha & Cardinal, 2017) to evaluating NCAA divisional differences in athletic identity (Huml, 2018) to retrospective studies examining changes in athletic identity (Houle et al., 2010) and many more.

The AIMS instrument was selected for this study because it focuses solely on athletic identity as opposed to other instruments which explore other areas such as the academic identity of the participant. Additionally, the AIMS is accessible with just seven easy-to-understand questions which could improve survey response rates. Next, it provides a simple 7-49 point score as the dependent variable which is easily used in statistical analysis. Finally, the AIMS is the first and most widely recognized instrument in the field of study.

This study sought to discover potential differences in athletic identity levels of transfer student-athletes in comparison to non-transfer student-athletes as well as to

determine if a relationship existed between athletic identity and a student's commitment to their sport during the pandemic. A variety of institutions were purposefully selected for the sample to ensure a mix of divisions, enrollment sizes, as well as public and private schools. The dependent variable was the AIMS score (range 0-49). Independent variables included sport, year in school, ethnicity, self-reported academic experience, transfer status (native vs. transfer), previous institutional/divisional level, current NCAA divisional level, reason for transfer, and potential changes in commitment to sport related to the pandemic. The AIMS instrument and demographic questionnaire was distributed as a web-based survey to student-athletes at sample schools. A single link to access the survey was used to protect the anonymity of the respondents. Data was analyzed using GLM-Univariate with the SPSS statistical program.

Significance of the Study

Research regarding athletic identity and collegiate student-athletes is common and often investigates factors such as academic performance including GPAs and academic major selection (Beron & Piquero, 2016; Foster & Huml, 2017), gender (Brown & Hartley, 1998), ethnicity (Beamon, 2012; Beamon & Bell, 2006), and divisional differences (Griffith & Johnson, 2002; Mathews et al., 2021; Sturm et al., 2011), among other variables. However, there is a lack of published empirical literature on the potential variations in athletic identity levels specifically of transfer student-athletes versus native student-athletes. Additionally, due to the recency of the COVID-19 pandemic, research on how it impacted student-athletes is rare. While quality research aimed at adding new knowledge has merit of its own, more importantly this study sought to provide clarity and guidance to athletic and campus administrators as they assist their student-athletes

navigate the significant transition experienced as a transfer student.

In addition to the desire to assist student-athletes in achieving their goal of graduation, this research will potentially influence practices at the institutional and NCAA level. First, as the student-athlete transfer population continues to grow, driven partly by the availability of the NCAA Transfer Portal (Johnson, 2019) and the new transfer legislation beginning 2021-2022 (Dellenger, 2021; NCAA, 2021), the need for targeted research on this population is imperative. Appendix A provides a timeline of this legislation in relation to data collection for the present study. Additionally, pressures are mounting at the institutional and state level in regards to retention and graduation rates and transfers play a role in these rates. Furthermore, it has been established that transfer student-athletes often lose credits upon transferring, lower team Academic Progress Rate (APR) scores (due to future retention issues and/or ineligibility), and have lower graduation rates as compared to native student-athletes (NCAA, n.d.-a). As evidence, the NCAA's data-driven Graduation Risk Overview (GRO) analysis highlights transferring as one of five risk factors impacting future academic performance and graduation (Brecht & Burnett, 2019). Finally, the new funding source for NCAA Division I institutions from Academic-Based Revenue Distributions whereby the NCAA awards significant monies annually to member institutions that reach certain APR and graduation metrics contributes to the significance of this study (NCAA, n.d.-e, n.d.-f). Since transfer student-athletes make-up 10%-22% of all rosters at the Division I and Division II level (NCAA, 2020b, 2020d), gaining a greater understanding about this specific population could make a sizeable impact on retention and graduation as well as the NCAA metrics of APR and Graduation Success Rate (GSR).

The COVID-19 pandemic impacted much of American life beginning in the spring of 2020. Colleges and universities were not immune. Student-athletes experienced the cancellation of seasons, the loss of the ability to compete for championships, and new pandemic-related rules and regulations regarding everything from academics to health and wellness to competition. In spring 2020, the early stage of the pandemic in the United States, many institutions closed campuses and sent students home. Additionally, in a historic move, the NCAA shut down all spring sports seasons and cancelled all spring championships (NCAA, 2020e).

These closings and cancellations caused mental health concerns for athletes world-wide. One study from the United Kingdom found that elite athletes were more prone to high anxiety compared to non-athletes during a lockdown and, opposed to previous literature, athletes did not show greater resilience than non-athletes likely due to identity foreclosure (Knowles et al., 2021). Also, a South African study found that the pandemic and its resulting isolation/quarantine resulted in “physical deconditioning, altered sleep patterns, worsening nutrition, uncertainty on return to sport and feelings of depression” (Pillay et al., 2020, p. 676). Access to training facilities was a key issue for many athletes as well. A study of Division III student-athletes noted that during the pandemic the inability to access athletic facilities caused stress, helplessness, and decreased motivation in their sport (Bullard, 2020). Feelings of isolation were also rampant among NCAA student-athletes and administrators and coaches attempted to keep a sense of community while apart. During the early months of the pandemic in spring 2020, one study found that “student-athletes who received more social support and reported more connectedness with teammates reported less dissolution of their athletic

identity” (Graupensperger, et al., 2020, p. 662). Even upon return to campuses in the fall of 2020 student-athletes, like many others, had to endure regular testing, quarantine, isolation and additional game cancellations.

In the fall of 2020, the NCAA conducted a student-athlete well-being survey of nearly 25,000 student-athletes across all divisions to assess how student-athletes were coping with everything from academics to housing to mental health and career planning in the pandemic-era. The top three mental health concerns were; “academic worries”, “COVID-19 health concerns” and “lack of access to sport” (NCAA, 2021b). From an academic perspective as the pandemic wore on into fall 2020, student-athletes were less optimistic about their ability to keep up and pass coursework especially the large number in 100% virtual classes (NCAA, 2021b). Furthermore, the pandemic negatively impacted career planning for 62% of senior respondents and almost half reported that they lost out on or chose to opt out of internship or job opportunities (NCAA, 2021b).

COVID testing protocols, masking, social distancing, and quarantine requirements became a part of the student-athlete experience. During the fall 2020 semester, 28% of student-athletes noted that they were tested weekly and 37% of student-athletes reported that they had been required to isolate due to exposure, contact tracing, being symptomatic and/or having a positive test (NCAA, 2021b). This number rose to 44% of the Division I respondents. The concerns about the pandemic were not just personal as student-athletes struggled with close friends or family members being hospitalized or dying from COVID-19. These concerns disproportionately affected students of color with 14% of African-American and 14% of Latinx student-athletes reporting these concerns compared to 7% of Caucasian student-athletes (NCAA, 2021b).

Finally, from an athletic identity perspective, nearly 25% of student-athletes agreed or strongly agreed that they had a lack of motivation to train during fall 2020 as a result of complications and concerns surrounding the pandemic (NCAA, 2021b).

Researchers have discovered many short-term negative effects of the pandemic on athletes. Yet, there are some indications that some athletes were able to grow their non-athletic identities during the pandemic. A study from the United Kingdom found that during the pandemic some athletes did experience initial negative outcomes due to separation from sport but the athletes then began to adapt to their new environment, find new ways to stay connected to fellow athletes, developed new goals, participated in new hobbies and had time to reflect on their athletic self (Woodford & Bussey, 2021).

While there is a growing number of published resources regarding the effect of the pandemic on athletics there are still relatively few empirical studies and even fewer that focus on athletic identity. The early studies do show that a sudden cancellation of a season mimics the feelings of a season-ending injury which is known to cause distress and a loss of athletic identity for some athletes (Brewer, 1993; Brewer, et al., 2010). As the pandemic wears on into 2022, it is important to continue to study its effects on the athletic identity levels of NCAA student-athletes.

Delimitations and Assumptions

The study will be framed by a number of delimitations and assumptions. For delimitations, the study will include only institutions that meet specific criteria with purposeful sampling to ensure a diversity of institutions. Within the constraints previously mentioned, the researcher made every attempt to ensure a diverse sample specifically with respect to class standing, gender, ethnicity, and sport. Assumptions

include that the completed surveys will be representative of the student-athlete population nationally and that student-athletes are able to accurately self-analyze when completing the survey. Finally, there is little understanding at this time of the wide-ranging impact of the COVID-19 pandemic of 2020-2022 in regards to student-athlete transfer opportunities, rates, or potential causes for transfer. Two survey questions (one Likert, one free response) were included that attempt to capture the individual student-athlete's feelings regarding the potential effect of the pandemic on their athletic identity.

Definitions of Terms

A significant number of specialized terms will be used throughout this study and likely need further description. Please note that though discrepancies likely exist regarding some of these terms, the definitions below provide context for greater understanding of the study.

1. Academic Progress Rate (APR) - NCAA Division I metric used to assess retention and eligibility rates at the sport and institutional level (NCAA, n.d.-e).
2. Athletic Identity - "the degree to which an individual identifies with the athlete role, within the framework of a multidimensional self-concept" (Brewer et al., 1993, p. 237).
3. Division I - NCAA's designation for typically the largest schools in terms of enrollment, budgets, and commitment to competitive athletics (NCAA, n.d.-c, 2007).
4. Division II - NCAA's division which falls in the middle of the larger wealthier Division I and the most balanced Division III in terms of athletic

budgets, enrollments, and time demands of student-athletes. The balance between the student and athlete role is expressed but athletic scholarships are still available (NCAA, 2007, 2019).

5. Division III - NCAA's designation for typically the smallest institutions by enrollment and budget which are often those with the highest focus on the balance between academics and athletics. No athletic scholarships are allowed and athletic departments and student-athletes are expected to mirror their institution closely in every area (NCAA, n.d.-b, n.d.-d, 2007, 2020c).
6. Graduate transfer - An NCAA student-athlete who graduates from one institution and then transfers to another institution to pursue a graduate degree and has athletics eligibility remaining (NCAA, 2020f).
7. Graduation Success Rate (GSR) - An NCAA metric created to more accurately measure an athletic department's graduation rate. It accounts for both transfers into the program and removes those who transfer out in good academic standing (NCAA, n.d.-g).
8. Identity - Personal self-concept based on an individual's view of himself or herself also entailing a concurrent observation of others' recognition of the individual (Erikson, 1959).
9. Junior College (JUCO) - While once used to refer to lower-divisions of private universities (Cohen et al., 2014), now it is commonly used in athletic circles to define all associate-granting institutions that sponsor intercollegiate athletics.

10. Lateral transfer - A student who transfers from one community college to another community college or from one university to another university (Bahr, 2009).
11. Native student - A student who begins and continues their collegiate enrollment at the same institution (Ishitani, 2008).
12. National Collegiate Athletic Association (NCAA) - Governing body of the vast majority of institutions of higher education competing in intercollegiate athletics in the United States.
13. NCAA Transfer Portal - “created as a compliance tool to systematically manage the transfer process from start to finish, add more transparency to the process among schools and empower student-athletes to make known their desire to consider other programs” (Johnson, 2019, para. 4).
14. Swirling transfer - A student who transfers back and forth between two or more institutions (de los Santos & Wright, 1989; McCormick, 2003).
15. Transfer student - A student who begins enrollment at one institution and then enrolls in a new, different educational institution.
16. Vertical transfer - A student who transfers from a community college to a university (Handel & Williams, 2012).

Organization of the Study

The remaining four chapters of the study are arranged as follows. Chapter 2 includes a review of literature focusing on NCAA transfer student-athletes, identity and identity development theories, and the concept of athletic identity. Chapter 3 outlines the study’s research design, methodology, description of the AIMS survey instrument, and

sample specifics. The findings and analysis of data are included in chapter 4. Finally, the summary, conclusions, and recommendations of the study are presented in chapter 5 followed by appendixes and references.

CHAPTER 2: LITERATURE REVIEW

Transfers are common, 38% of all fall 2011 first-time students transferred from one institution of higher education to another at least once during their collegiate careers (Shapiro et al., 2018). Student-athletes transfer at a lower, but still significant, rate with 13% of all NCAA Division I student-athletes and approximately 18% of all Division II student-athletes transferring in 2018-19 (NCAA, 2020b, 2020d). Since collegiate student-athletes are often innately tied to their athlete role it is likely that their decision to transfer is associated with their athletic identity.

The concept of identity is vital to identity theory as well as student development in higher education. Erikson (1959) established that identity is a personal self-concept based on an individual's view of himself or herself but also entails a concurrent observation of others' recognition of the individual. Chickering (1969) agreed that assessing and valuing how one is seen by others is the basis for identity formation, which is a critical component in the development of adolescents. Hogg et al. (1995) describes identity theory as one that attempts to explain an individual's role-related behaviors. It is important to also note that social groups play a role in developing and influencing the role identity of individuals (Hogg et al., 1995; Stryker, 1968). Lastly, a hierarchy of the various roles develops within an individual, and the highest role often dictates responses to various situations (Serpe, 1987).

College students likely identify with multiple identities or roles based on a variety of factors, and each develops a unique hierarchy. Though each of these roles or identities plays a part in determining behaviors and influences the motivators of the student, the most valued roles are utilized most often. Collegiate student-athletes have the additional

complex role or identity of athlete. Brewer et al. (1993) defines athletic identity as “the degree to which an individual identifies with the athlete role, within the framework of a multidimensional self-concept” (p. 237). Positive and negative outcomes of high athletic identity levels are found for athletes at all levels.

Positive outcomes include better athletic performance (Horton & Mack, 2000), increased physical activity and sports team participation for children and adolescents (Anderson et al., 2009), and development of stronger social networks that aide commitment to sport (Cutler, 1994; Horton & Mack, 2000; Lavalley et al., 1997). Yet, the potential negative outcomes of high athletic identity levels often cause greater concern and include: an inverse relationship with the student role (Adler & Adler, 1991; Hale & Waalkes, 1994; Melendez, 2009-2010; Miller & Kerr, 2003; Sturm et al., 2011), a hyper-focus on the athlete role at the exclusion of other roles that can lead to identity foreclosure (Albion & Fogarty, 2005; Beamon, 2012; Brewer & Petitpas, 2017; Brewer et al., 1993; Brown et al., 2000; Linnemeyer & Brown, 2010), lesser focus on career development (Brown et al., 2000; Houle & Kluck, 2015; Linnemeyer & Brown, 2010; Murphy et al., 1996; Tyrance et al., 2013), and greater difficulty working through athletic retirement (Alfermann et al., 2004; Baillie & Danish, 1992; Brewer et al., 1999; Cutler, 1994; Lally, 2007; Lavalley et al., 1997; Webb et al., 1998).

The review of literature will address the NCAA, its divisional structure and differences, transfers and transfer student-athletes. Additionally, identity, identity theory, athletic identity, and measurement of athletic identity will be explored (Table 1).

Table 1*Identified Themes in the Literature*

Theme	Sources
NCAA	
History and purpose Divisional structure	NCAA, n.d.-b, 2018; “Proceedings”, 1906 Alabama A & M University, n.d.; Kissinger et al., 2015; Knight Commission, 2018; NCAA, n.d.-b, n.d.-h, n.d.-i, 2007, 2016, 2018, 2019, 2020c, 2020g; <i>USA Today</i> , n.d., 2019; University of Texas, n.d.
Transfer Students and Transfer Student-Athletes	
Transfer students and transfer student-athletes	Konsky, 2003; NCAA, 2020b, 2020d; Richards et al., 2016, Shapiro et al., 2018
Types of transfer students	Bahr, 2009; Cohen et al., 2014; de los Santos & Wright, 1989; Handel & Williams, 2012; McCormick, 2003; NCAA, 2018, 2020d, 2020f, 2020h, 2020i; Taylor & Jain, 2017; Townsend, 2001; Townsend & Dever, 1999
Prevalence of student-athlete transfers	NCAA, n.d.-a, 2018, 2020a, 2020b, 2020c; NJCAA, 2019-2020; Shapiro et al., 2018
Reasons student-athletes transfer	Le Crom et al., 2009; Letawsky et al., 2003; NCAA, 2016, n.d.-a; Richards et al., 2016
Challenges of transfers	Eggleston & Laanan, 2001; Grites, 2013; Hills, 1965; Ishitani, 2008; Ishitani & McKitrick, 2010; NCAA, n.d.-a
Identity, Identity Theory, and Athletic Identity	
Identity, Identity Theory, and Athletic Identity	Erikson, 1959; Hogg et al., 1995; Mead, 1934/2015; Oyserman et al., 2012;
Identity and identity theory	Chickering, 1969; Erikson, 1959; Hogg et al., 1995; Kaplan & Flum, 2010; Serpe, 1987
Athletic identity	Adler & Adler, 1991; Brewer et al., 1993; Good et al., 1993; Lamont-Mills &

Christensen, 2006; Rasquinha & Cardinal, 2017

Athletic identity in relation to age (Brewer & Petitpas, 2017; Chickering, 1969; Erikson, 1959; Houle et al., 2010; Lally, 2007; Lally & Kerr, 2005; Marcia, 1966; Miller & Kerr, 2003)

Athletic identity foreclosure (Albion & Fogarty, 2005; Beamon, 2012; Beamon & Bell, 2006; Brewer & Petitpas, 2017; Brewer et al., 1993; Brown et al., 2000; Good et al., 1993; Kissinger & Miller, 2007; Lally, 2007; Linnemeyer & Brown, 2010; Marcia, 1966; Miller & Kerr, 2003; Murphy et al., 1996)

Athletic identity in relation to athletic performance (Anderson et al., 2009; Cutler, 1994; Horton & Mack, 2000; Lally, 2007; Lavalley et al., 1997; Miller & Kerr, 2003)

Athletic identity in relation to academics (Adler & Adler, 1991; Antshel et al., 2016; Beron & Piquero, 2016; Bimper, 2014; Foster & Huml, 2017; Hale & Waalkes, 1994; Melendez, 2009-2010; Miller & Kerr, 2003; Sturm et al., 2011)

Athletic identity in relation to career development (Albion & Fogarty, 2005; Brown & Hartley, 1998; Brown et al., 2000; Cabrita et al., 2014; Grove et al., 1997; Houle & Kluck, 2015; Lally, 2007; Lally & Kerr, 2005; Linnemeyer & Brown, 2010; Martens & Cox, 2000; Miller & Kerr, 2003; Murphy et al., 1996; Tyrance et al., 2013)

Athletic identity in relation to transition out of sport (Alfermann et al., 2004; Baillie & Danish, 1992; Brewer et al., 2010; Brewer et al., 1999; Cutler, 1994; Grove et al., 2004; Lally, 2007; Lavalley et al., 1997; Webb et al., 1998)

Measuring athletic identity Anderson et al., 2007; Harrison et al., 2014; Nasco & Webb, 2006; Ronkainen et al., 2016; Yukhymenko-Lescroart, 2014 Athletic Identity Measurement scale (Brewer & Cornelius, 2001; Brewer et al., 1993; Houle et al., 2010; Huml, 2018; Rasquinha & Cardinal, 2017; Russell et al., 2018; Tyrance et al., 2013)

NCAA

History and Purpose

According to the Proceedings of the First Annual Convention of the Intercollegiate Athletic Association of the United States (1906), the organization was formed in 1905 in response to several factors including concerns over amateurism, the frequency of non-student participants, the notable rise in football injuries, and the “exaggerated prominence of athletics in college life” (p. 28). The group’s first constitution, ratified in 1906 by 38 colleges and universities (“Proceedings,” 1906), became the precursor to the National Collegiate Athletic Association (NCAA). The first president of the fledgling organization, Captain Palmer Pierce of the United States Military Academy, displayed accurate foresight in concluding that the group would “dominate the college athletic world” and “its strength will grow until its influence will become truly national” (“Proceedings,” 1906, p. 32). The NCAA today has indeed grown into the premier intercollegiate athletic organization governing over 1,100 institutions in three divisions with nearly 20,000 teams of approximately 500,000 student-athletes annually (NCAA, n.d.-b). The aims of the organization remain as they were over 100 years ago as written in bylaw 1.3.1: “A basic purpose of this Association is to maintain intercollegiate athletics as an integral part of the educational program and the athlete as an integral part of the student body and, by so doing, retain a clear line of demarcation

between intercollegiate athletics and professional sport" (NCAA, 2018, p. 1).

Divisional Structure

The NCAA split into three distinct divisions in 1973 (NCAA, 2007). Division I is further subdivided based on football with the highest Football Bowl Subdivision (FBS), then the Football Championship Subdivision (FCS), and lastly institutions who either play non-scholarship football or do not sponsor football (formerly I-AAA) (NCAA, 2007). Division II and Division III are the final groups of institutions within the organization (NCAA, 2007). A brief, and potentially oversimplified, explanation of the differences between each division involves finances, the amount and type of rules and regulations, level of play, and student-athlete time demands (NCAA, 2007).

Division I

Some have noted that Division I typically includes the largest schools in terms of enrollment and institutional and athletic budgets (Kissinger et al., 2015). Yet, there is great discrepancy between Division I institutions. The University of Texas boasts an enrollment of 51,832 as of fall 2018 (University of Texas, n.d.) in sharp contrast to Alabama A & M University's enrollment of 5,814 (Alabama A & M University, n.d.). Despite these differences, NCAA Division I institutions constitute the largest on average undergraduate enrollment of the three divisions at nearly 10,000 and just 4% of the student body are student-athletes on average (NCAA, n.d.-b). Extreme differences also exist in terms of finances. The University of Texas, a traditional FBS power, recorded revenues of nearly \$215 million and expenses of over \$207 million leading intercollegiate athletics, while Alabama A & M, an FCS institution, showed revenues of just over \$3 million and expenses of \$9.4 million in 2016-17 (*USA Today*, n.d.).

A majority of the wealthiest athletic departments reside in the “Power 5” conferences (Atlantic Coast Conference, Big Ten, Big XII, Pac-12, Southeastern Conference). The wealthiest 48 programs in terms of revenue are Power 5 members (*USA Today*, n.d.). The NCAA mandates that these institutions and other FBS programs award at least 90% of the minimum 200 athletic scholarships available over any two-year period to various sports totaling at minimum \$4 million (NCAA, 2007). Fifty-seven percent of Division I student-athletes receive some amount of athletic aid and many have their entire costs paid due to their athletic abilities (NCAA, n.d.-b, n.d.-h).

Athletic scholarships are a significant cost for many departments but again differences exist within the segments of Division I. The wealthiest quarter of FBS institutions spend approximately 11% of their athletic budget on athletic aid whereas the average FCS institution needs 26% of its budget to cover required scholarship costs (Knight Commission, 2018). FCS programs often have smaller budgets than FBS schools as their minimum amount of total athletic aid awarded must equal \$877,000 per year due, in part, to fewer allowed scholarships in football (NCAA, 2007). Finally, colleges and universities in Division I that do not sponsor football or have a non-scholarship football program are designated I-AAA and typically have smaller budgets (NCAA, 2007).

The guiding ideologies and principles of each NCAA division demonstrate the differing priorities of each level. They are similar in some respects across the association but differ in significant ways. Division I include principles, such as: “academic quality” and “service to the public” but also “athletics excellence,” “extensive athletics opportunities,” “spectator/revenue producing sport objectives,” and “self-sufficient operations” (NCAA, 2007, p. 5). These principles speak to the expectation of the highest

level of athletic play but also the highest level of financial commitment required. Additionally, the NCAA regulates Division I more than any division due to factors including financial implications, marketing and media exposure, concerns over amateurism, recruiting, as well as the initial and continuing eligibility of student-athletes (NCAA, 2007).

The Division I student-athlete devotes more of his or her time to their sport compared to other divisions. The NCAA's frequent multi-division survey named GOALS (growth, opportunities, aspirations, and learning of students in college) found Division I student-athletes had the highest time demands with 34 hours per week (NCAA, 2016). FBS football student-athletes log nearly 42 hours per week to sport-related endeavors, which was the highest total for all divisions (NCAA, 2016). As a result, Division I male and female student-athletes were most at risk for falling behind in coursework while in season compared to those in Division II and Division III (NCAA, 2016). In addition, athletic schedules are such that student-athletes are unable to take certain class times or even academic majors open to the general student population. Half of the FBS football student-athletes surveyed indicated that their sport had prevented them from taking a class they wanted to take (NCAA, 2016). In comparison, 30% of Division II football student-athletes, and 21% of Division III football student-athletes indicated they could not take a desired course (NCAA, 2016). Lastly, in every division some student-athletes indicated that their sport involvement influenced their choice of major (NCAA, 2016). While this fact might be assumed due to the time and travel demands of student-athletes, the results fell along divisional lines with 85-94% of Division III student-athletes, 75-87% of Division II student-athletes, and only 70-84% of Division I student-athletes

agreeing that they would select the same major if they were not competing (NCAA, 2016).

Division III

Division III institutions operate on the other end of the athletic spectrum and exhibit the most balanced approach to sport, academics, and college life. Their student-athletes cannot receive athletically related financial aid, have more regionalized contests reducing time away from campus, and have shorter practice and playing seasons (NCAA, 2020c). Student-athletes in this division report greater engagement in outside-of-the-classroom academic pursuits such as research, study abroad and thesis projects in addition to a greater rate of volunteering (NCAA, 2020c). Facilitating this balanced approach, Division III athletics proved to have the lowest team time commitment of all divisions with an average of 28.5 hours per week (NCAA, 2016). Additionally, many Division III institutions are smaller with an average undergraduate enrollment of 2,628 students (NCAA, 2020c) enabling student-athletes greater access to faculty and the ability to become more ingrained with the general student population. In fact, the Division III Philosophy Statement shows the division's commitment to balance with guidelines such as: the academic performance of the student-athletes should be on par with the general student population and student-athletes are not to be treated differently than other students (NCAA, n.d.-i). Additionally, student-athletes should be supported and encouraged to participate in non-athletic pursuits to become more well-rounded individuals (NCAA, n.d.-i). Also, Division III athletic departments are asked to function in a manner consistent with their institution in terms of hiring practices, coaches' compensation, fiscal responsibility, and other areas in accurate reflection of the

institutional mission (NCAA, n.d.-i). Finally, Division III student-athletes should be held to the same admissions policies and procedures as the typical applicant (NCAA, n.d.-i).

From a financial standpoint, Division III is the most cost-effective level of the NCAA but expenses are on the rise. Division III programs average operating expenses for institutions without football in 2019 ranged from \$477,916 to \$11.7 million (NCAA, 2020g). Division III football playing institutions had expenses that ranged from \$1.26 million to \$18.4 million with a median of \$4.3 million (NCAA, 2020g). Yet, the increases from 2005-2019 in expenses are staggering. Football playing Division III athletic departments saw expenses increase by 141% between 2005 and 2019 (NCAA, 2020g). The non-football playing Division III members expenses rose 195.5% during the same years (NCAA, 2020g). While these numbers are well below Division I figures, the rapid rise in expenses is of import.

Division II

Division II institutions fall somewhere in between Division I and Division III in many respects including athletic budgets, school size, and time demands of the student-athletes. From a financial perspective, Division II athletic budgets for non-football playing members range from \$3.3 – \$9 million and football playing members have budgets of \$4.1 – \$10.9 million (NCAA, 2019). Also, Division II athletic programs only need to sponsor ten teams (though most sponsor many more) and total aid awarded must equal at least \$250,000 per year (NCAA, 2007), and 60% of all student-athletes accept some level of athletic scholarship (NCAA, n.d.-b). Many believe Division II is the most difficult level to maintain in today's landscape as the schools do not reap the revenues from "March Madness" (\$216M back to Division I men's basketball programs in 2018

(*USA Today*, 2019, March 26)) or gain extensive exposure through media outlets for playing at the highest level yet still have the costs of athletic scholarships.

Student-athlete balance is a greater focus at this level than Division I with the Division II Philosophy Statement listing two of ten guiding principles related to this idea: “academic success and personal development of the student-athlete,” and “proper balance between athletics and campus life” (NCAA, 2007, pp. 4-5). Division II is also at the midpoint per enrollment as 88% of their institutions have fewer than 7,500 students (NCAA, 2019). From a legislative perspective, Division II has fewer NCAA rules and regulations since competitive equity between members is less of a concern and more governance is handled at the institutional level in comparison to Division I (NCAA, 2007).

Transfer Students and Transfer Student-Athletes

More than 34,000 transfer student-athletes were on Division I and Division II rosters in 2018-2019 (NCAA, 2020b, 2020d). While this figure is far less than the over 1 million students who transferred nationally from the Fall 2011 cohort (Shapiro et al., 2018), it is still a sizable percentage of the student-athlete population. Additionally, there are likely athletically related reasons why student-athletes transfer less than their non-student-athlete classmates. Until the 2021 transfer legislation some, like Konsky (2003), argued that the NCAA operated like a cartel by restricting movement with transfer rules which dictate athletics eligibility as well as athletic aid, especially for the major revenue producing sport student-athletes at the Division I level. In fact, in a recent study by Richards et al. (2016), while 23.8% of student-athletes had reported being transfers, an additional 16.3% of the sample reported that they had seriously considered transferring.

Yet, two major events could make significant impacts to future student-athlete transfer rates. First, the COVID-19 pandemic will most certainly impact transfer rates in some fashion. Secondly, the new NCAA legislation allowing student-athletes in all sports at the Division I level an opportunity to transfer and play their sport immediately (Dellenger, 2021) will make transferring easier and responds to Konkys's (2003) argument that for years the NCAA has acted as a cartel by restricting the movement of the highest profile student-athletes. Transfers in the sports of football and men's and women's basketball specifically are expected to increase as a result of the relaxing of the strict transfer regulations.

Types of Transfer Students

Initially, there was a singular type of transfer student in American higher education, but today's landscape offers various transfer types and labels. Historically, the junior college student would, upon completion of an Associate of Arts or an Associate of Science degree, transfer to a baccalaureate-granting institution (Cohen et al., 2014; Townsend, 2001). This most traditional transfer situation is now referred to as a "vertical" transfer in literature (Handel & Williams, 2012; Taylor & Jain, 2017; Townsend, 2001). Another type is the "lateral" transfer who moves from a community college to another community college or one university to another university (Bahr, 2009). Next, a "reverse" transfer matriculates from a university to a community college (Townsend & Dever, 1999). Finally, the "swirling" transfer is one who moves back and forth frequently between different types of institutions (de los Santos & Wright, 1989; McCormick, 2003). Student-athletes transfer often in the same ways as non-student-athletes but each transfer type has athletic eligibility ramifications for the student-athlete.

The NCAA defines a transfer student-athlete as one who was full-time during a regular academic term at a previous institution, practiced or competed with a college team, and/or received an athletic scholarship including summer school (NCAA, 2020h). The most common transfer types are called “2-4”, “4-4”, “4-2-4”, “4-4-4”, and “graduate transfer” in athletic circles.

A 2-4 transfer is akin to the vertical transfer and the student-athlete’s initial eligibility decision out of high school determines what type of courses the student must pass at the community college (“JUCO”) as well as if the student must graduate from the community college in order to become eligible at the NCAA institution. Additionally, the student must have a GPA of at least 2.50 in their transferable courses if transferring to a Division I school and a 2.20 GPA if transferring to a Division II institution (NCAA, 2020i).

The 4-4 transfer is one who moves from one university to another university. In most cases the student-athlete would be eligible if they meet progress towards degree requirements at the new institution due to the one-time transfer exception (for Division I) (Bylaw 14.5.5.2.10, NCAA, 2018). For many years the sports excluded from the one-time transfer exception at the Division I level included baseball, men’s basketball, women’s basketball, FBS football, and men’s ice hockey (Bylaw 14.5.5.2.10a, NCAA, 2018). This was changed in 2021 to allow these sports the same ability to transfer as other Division I student-athletes (NCAA, 2021). These “revenue” sports at the Division I level have had the most restrictive transfer rules though students, especially in the sports of men’s and women’s basketball, have still transferred at a high rate (Table 2).

Next, the 4-2-4 student-athlete transfer moves from a university to a community

college back to a university. In this instance, the student is required to graduate from the community college to become immediately eligible at the final university per rule (NCAA, 2020i). Students who transfer from one university to another university and finally to a third university are a 4-4-4s per NCAA terminology. In this situation if a student-athlete uses a one-time transfer exception to become immediately eligible after their first transfer, they are required to sit out of competition during their first year at their final institution (Bylaw 14.5.5.2.10b, NCAA, 2018).

Finally, student-athletes who graduate from one institution and have athletic eligibility remaining are allowed to transfer to another NCAA institution and compete immediately as a “graduate transfer” (NCAA, 2020f). Only 0.5% of the Division I student-athlete population are graduate transfers and these students are most prevalent in men’s basketball (NCAA, 2020f). Yet, NCAA legislation, that began August 2020, allows graduated student-athletes the flexibility of pursuing not just a master’s degree but also a graduate certificate or seeking a second baccalaureate degree at their new institution which will enable students with lower GPAs the ability to transfer more freely (NCAA, 2020d).

Prevalence of Student-Athlete Transfers

The National Student Clearinghouse Research Center reported that 38.0% of the national fall 2011 cohort of first-time college students transferred from one institution to another at least once in a six-year period (Shapiro et al., 2018) but when adjusting for only full-time students the rate drops to 28.7%. Per NCAA and National Junior College Athletic Association (NJCAA) rules student-athletes must be registered in a full-time course of study to participate; therefore, this rate is more comparable when evaluating the

student-athlete transfer rates (NCAA, 2018 (Bylaw 14.01.2); NJCAA 2019-2020). Since 2003, approximately 10% of all Division I women’s rosters and approximately 15% of all Division I men’s rosters are made up of student-athletes who have transferred (NCAA, 2020c). For the same time period, at the Division II level approximately 14% of all women’s rosters and 21% of all men’s rosters classified as transfer students (NCAA, 2020b). Yet, some sports experience higher transfer rates than the national average. Alarming, 40% of all men’s basketball student-athletes who enter a Division I school as a freshman will transfer by the end of their second year (NCAA, n.d.-a). Additionally, NCAA Division I data shows that men historically transfer more than women but the transfer rate of women is increasing especially in the sport of women’s basketball (NCAA, 2020a). Division III transfer numbers are not published by the NCAA.

Table 2

Top Transfer Sports in Division I & II (2018-19 data)

NCAA Division	Sport	Percent of transfers on rosters during 2018-19
Division II	Men's Basketball	35.1%
Division II	Baseball	33.7%
Division I	Men's Basketball	29.8%
Division II	Women's Basketball	25.3%
Division II	Beach Volleyball	25.0%
Division II	Men’s Soccer	24.3%
Division I	Baseball	24.2%
Division I	Men’s Soccer	23.0%
Division I	Beach Volleyball	22.0%
Division I	Women’s Basketball	20.4%
Division II	Football	19.0%
Division II	Men’s Golf	17.7%
Division II	Men’s Tennis	16.8%
Division II	Softball	16.5%
Division I	FCS Football	16.0%

Division I	Women's Tennis	15.9%
Division I	Men's Tennis	15.8%

Note: Only sports at 15% or more included

Reasons Student-Athletes Transfer

It is important to understand why student-athletes select their initial institution as it gives insight into why future transfers might occur. NCAA student-athletes select their initial college choice based on a variety of factors but the top reason in each division is “athletics” per the GOALS survey (NCAA, 2016). In fact, 86% of Division I student-athletes, 87% of Division II student-athletes, and 80% of Division III student-athletes marked that “athletics” was a deciding factor for their initial college choice (NCAA, 2016). “Academics” was the second determining factor for student-athletes in each division but additional athletically related transfer reasons were prevalent in every level including “athletic facilities” and “presence of coach” (NCAA, 2016). Letawsky et al. (2003) found similar reasons why student-athletes selected their initial college including, in order, academic majors, the head coach, academic support services, the type of community, and the school's sports traditions. Understandably, student-athletes consider athletic related factors when deciding college to attend.

It is no surprise then that the top reasons student-athletes decide to transfer to another institution are athletically related. The most prevalent reasons why a student-athlete transferred or had considered transferring were “coaching style,” “playing time,” and “staff change” (Richards et al., 2016). In fact, 56% of those who transferred or seriously considered transferring listed “coaching style” as the reason (Richards et al., 2016). The influence of the coach is significant at every level but research has found it is more impactful in some sports than others. For both men's and women's basketball at the

Division I and Division II levels, the coach's role is pivotal not only in the initial college selection but also in regards to retention/transfer decisions. Just 41% of Division I men's basketball student-athletes, 44% of Division II men, 42% of Division I women, and 47% of Division II women noted that they would have attended their present college if there was a different head coach (NCAA, 2016). Furthermore, in regards to transferring, 46% of men's basketball student-athletes agreed or strongly agreed that they would consider transferring if their current coach left the school (NCAA, 2016). An NCAA study of 2013 men's basketball Division I transfers found that 90% transferred due to athletic reasons (NCAA, n.d.-a). Other sports which were outliers in response to this question were Division II men's lacrosse (43%), FBS football (37%), and Division II football (35%) (NCAA, 2016). On the other end of the spectrum, Division I women's rowers were not as tied to their coaches with just 2% of the respondents noting that they would transfer if their coach left the school (NCAA, 2016).

One major factor which could play a role in the retention of a student-athlete is the athletic scholarship at the Division I and Division II levels. Yet, maybe surprisingly, Le Crom et al. (2009) did not find that athletic aid as a single variable was significantly related to retention. The study found that the combination of scholarship, gender, and sport type was a significant predictor of retention though (Le Crom et al., 2009). Results showed that men transferred more than women and student-athletes on team sports transferred more often than individual sports (Le Crom et al., 2009). Richards et al. (2016) concluded that it is rare that a student-athlete stays at an institution or transfers based on a single factor.

Finally, two major factors which play into why a student-athlete may or may not

transfer in 2021 and beyond are the unprecedented COVID-19 pandemic and the new NCAA transfer rule. The COVID-19 pandemic and its fallout was felt differently across campuses nationally as some colleges eliminated athletic teams entirely, some suspended operations, some moved sports to non-traditional seasons, and those that chose to play suffered from postponed and cancelled games, strict practice and travel restrictions, and regular COVID-19 testing not to mention the effect on academics and mental health. At this time, the true impact of the pandemic on the collegiate student-athlete is unknown. Next, new NCAA legislation now allows all Division I student-athletes the opportunity to transfer one time to another Division I institution and not sit out a season of competition (Dellenger, 2021; NCAA, 2021). This will allow those competing in the highest profile “revenue” sports the freedom to move schools easily and play immediately.

Challenges of Transfers

Transition challenges are well researched from “transfer shock” resulting in a lower GPA by students (Hills, 1965; Ishitani, 2008), to a lack of campus engagement by this population (Ishitani & McKittrick, 2010), to a lack of campus support for transfers (Eggleston & Laanan, 2001). Additionally, Grites (2013) lists specific challenges for vertical transfers including learning the map of potentially a larger campus, understanding institutional acronyms, learning the academic policies, figuring out the expectations of faculty, learning about advising and registration, becoming proficient at various computer systems and apps, as well adjusting to the campus culture. Likewise, transferring student-athletes face these academic challenges along with a variety of athletically related hurdles. Additional obstacles include: NCAA specific transfer rules, the possibility of “red-shirting” and not competing for a year, the quest to earn playing

time, learning a new system or playbook, becoming integrated into a new team, and trusting new coaches. Many transferring student-athletes also must make changes to their intended major at their new school to meet NCAA imposed academic benchmarks. The NCAA (n.d.-a) reports that transfer students often lose credits upon transferring, lower team APR scores (due to future retention and/or ineligibility issues), and have lower graduation rates as compared to native student-athletes.

Identity, Identity Theory, and Athletic Identity

Multiple disciplines, theories, scholars, and definitions abound regarding the concept of “identity.” Yet, each definition of identity includes both a personal response of the representation of self and also the cognizant relationship between the individual and his or her social group. Erikson (1959) concludes that “personal identity is based on two simultaneous observations: the immediate perception of one’s selfsameness and continuity in time; and the simultaneous perception of the fact that others recognize one’s sameness and continuity” (p. 23). The personal identity is often molded during adolescence as it is a typical period of identity crisis and role confusion, but identity formation is continual and evolving per Erikson (1959). Mead (1934/2015) concurred that the self is developed in conjunction with, and as a result of, the prevailing attitudes about the individual by the social group in which the individual participates. Mead (1934/2015) noted that the individual records and organizes these attitudes in relation to the overall group attitude thus becoming a reflection of the group and concluded, “all selves are constituted by or in terms of the social process, and are individual reflections of it” (p. 201). More recently, Oyserman et al. (2012) defined identity succinctly as those “traits, characteristics, social relations, roles, and social group memberships that define

who one is” (p. 69). This leads to the understanding that identity development is a microsociological process within the identity theory framework that focuses on roles, and role behaviors as responses to established identities in relation to social groups and society at-large (Hogg et al., 1995).

Identity and Identity Theory

Identity theory establishes the self as multi-faceted and stable but allows for flexibility within established roles as a reciprocal reflection of evolving social structures (Hogg et al., 1995). Typically, identity development involves assessing and valuing how one is seen by others (Chickering, 1969), thus the social group holds influence. Identity development is a pillar of the adolescent development process included in Chickering’s (1969) Seven Vectors of Development theory and therefore important for traditional aged higher education students. Additionally, identity theory teaches that how an individual is seen by others aides in developing a “role identity” and appropriate and expected behaviors are associated with specific roles (Hogg et al., 1995). The individual’s commitment to a role is predicated on their perception of others’ valuation of that role and their need or desire to occupy that role (Hogg et al., 1995). Furthermore, if an exclusive commitment to a particular role identity begins to emerge an “identity salience hierarchy” develops whereby the most prominent or valued role is the most likely role to be invoked in response to various situations (Serpe, 1987). The influence of social groups cannot be underestimated in an individual’s personal identity formation per scholars (Chickering, 1969; Erikson, 1959; Hogg et al., 1995; Kaplan & Flum, 2010).

Athletic Identity

College students likely identify with multiple identities or roles based on a variety

of factors. Each of these roles or identities plays a part in dictating and influencing behaviors. Student-athletes have the additional complex role of “athlete” to balance with their other roles. Athletic identity is defined as "the degree to which an individual identifies with the athlete role, within the framework of a multidimensional self-concept" (Brewer et al., 1993, p. 237). In addition, scholars note that athletic identity increases as sport participation levels increase (Good et al., 1993; Lamont-Mills & Christensen, 2006; Rasquinha & Cardinal, 2017). Moreover, Rasquinha and Cardinal (2017) found that the more culturally significant the sport is to the respective society (e.g. hockey in Canada), the higher the athletic identity levels of the participating athletes. Therefore, NCAA divisional classification and the respective status ascribed to it by family, peers, social media, mass media, and society at large may influence athletic identity levels in some student-athletes.

Adler and Adler (1991), based on their study of a major men’s Division I basketball program, developed a list of common factors which encourage high athletic identities in collegiate student-athletes and include: most arrive on campus with “athlete” as their primary role, their college environment is almost exclusively athletic, they are strongly influenced by their coaches, they exist in tight-knit athletic peer subcultures, and high-profile student-athletes often experience significant peer and/or national media exposure edifying their athlete role. The role of athlete is likely imbedded in every area of the individual’s life.

Athletic Identity in Relation to Age

Identity formation is most prevalent in adolescence (Chickering, 1969; Erikson, 1959; Marcia, 1966). Furthermore, many have found that the development of a strong

identity as an athlete peaks in late adolescence and can decline towards the end of the college years (Brewer & Petitpas, 2017; Houle et al., 2010; Lally, 2007; Lally & Kerr, 2005; Miller & Kerr, 2003). Miller and Kerr (2003) and Lally (2007) concluded that the height of athletic identity occurs at the beginning of participation in college athletics and declined as the student-athlete became more focused on other pursuits such as academic coursework and/or career development. Yet, Brewer and Petitpas (2017) found that “among sport participants, athletic identity (and possibly also athletic identity foreclosure) tends to increase from late childhood into adolescence and remain elevated until the prospects of reduced sport involvement are faced” (p. 119). Therefore, athletic identity may not be predicated on age but rather opportunity to continue playing competitively.

Athletic Identity Foreclosure

Identity develops through four main statuses: identity achievement, moratorium, identity foreclosure, and identity diffusion (Marcia, 1966). In each status, an individual has been faced with a “crisis” and identity evolves as an outcome of that specific crisis (Marcia, 1966). In identity achievement, an individual has worked through a crisis by examining all available possibilities before committing to an identity on his or her own terms (Marcia, 1966). Another status is identity diffusion which occurs when an individual, whether they have experienced a crisis or not, shows a lack of commitment to any one identity (Marcia, 1966). Moratorium occurs when the individual is currently in the crisis period and is actively working through options (Marcia, 1966). Finally, identity foreclosure involves an individual who, without the urging of a crisis, quickly and wholly adopts a specific identity without exploring other available options or pursuits often due

to external pressures or expectations (Marcia, 1966).

Foreclosure around athletic identity is common (Albion & Fogarty, 2005; Beamon, 2012; Brewer & Petitpas, 2017; Brewer et al., 1993; Good et al., 1993; Linnemeyer & Brown, 2010). All genders, ethnicities, sports, and sport levels have athletes who exhibit identity foreclosure but research has found it to be higher in African-American males in the sports of collegiate football and basketball (Beamon & Bell, 2006; Kissinger & Miller, 2007; Murphy et al., 1996). Conversely, Brown et al. (2000) did not find a significant relationship between athletic identity and foreclosure. Likewise, Lally (2007) and Miller and Kerr (2003) did not find athletic identity foreclosure in the samples they studied.

Athletic Identity in Relation to Athletic Performance

There are many benefits of a high athletic identity including an increase of physical activity (Anderson et al., 2009), and a likelihood of sport team participation (Anderson et al., 2009). Horton and Mack (2000) found in their study of marathon runners that higher athletic identity levels improved performance due to an increased commitment to running. Therefore, it is likely that many coaches value high athletic identity levels in their athletes. Yet, Lally (2007) discovered in research on Canadian intercollegiate student-athletes that while enjoying their best personal seasons in their respective sports the student-athletes intentionally reduced their athletic identity in preparation for transition out of competitive sport. Next, there are social benefits. As many athletes find their friends among their teammates and fellow competitors, high athletic identities can assist individuals in developing strong social networks (Cutler, 1994; Horton & Mack, 2000; Lavalley et al., 1997). Miller and Kerr (2003) found that an

early focus on the athlete role often helped defined the athletes' social roles and groups that further strengthened their commitment to athletics.

Athletic Identity in Relation to Academics

An inverse relationship between the athlete role and the student role is found in multiple studies of intercollegiate athletes over the years (Adler & Adler, 1991; Beron & Piquero, 2016; Hale & Waalkes, 1994; Melendez, 2009-2010; Miller & Kerr, 2003; Sturm et al., 2011). Several outcomes from an exclusive focus on the role of athlete have been observed including resistance to seeking out academic support services (Antshel et al., 2016), a lower grade point average (Beron & Piquero, 2016; Bimper, 2014), and choosing academic majors with less academic rigor (Foster & Huml, 2017). Beron and Piquero (2016) evaluated 19,000 GPAs from Divisions I, II, and III and found that GPA is directly influenced by a student-athlete's academic vs. athletic identity and few differences across divisions were present.

Athletic Identity in Relation to Career Development

A significant amount of research has occurred surrounding athletic identity levels in college student-athletes and career-related concepts. In regards to career maturity and athletic identity, the findings are varied as some have found that athletic identity is inversely related to career maturity (Brown et al., 2000; Houle & Kluck, 2015; Linnemeyer & Brown, 2010; Murphy et al., 1996; Tyrance et al., 2013) while others have found little or no evidence of this (Brown & Hartley, 1998; Martens & Cox, 2000). Linnemeyer and Brown (2010) suggested that the gap in career maturity between collegiate student-athletes and the general student population is shrinking possibly due to a recent focus on career programming by athletic departments. Therefore, athletic identity

may not be mutually exclusive of career development but could be a function of the time demands of college athletics. Reduced career development is a similar result of high levels of athletic identities for some (Albion & Fogarty, 2005; Grove, Lavalley, & Gordon, 1997; Tyrance et al., 2013). Additional career-related findings in relation to athletic identity include athletes showing less career adaptability (Tyrance et al., 2013), dysfunctional career attitudes (Albion & Fogarty, 2005), and prevalence of career indecisiveness (Albion & Fogarty, 2005). Yet, scholars have found positive relationships between athletic identity and career-related concepts including career decision-making (Cabrita et al., 2014), and the propensity to plan for a non-sport future including non-athletic related careers (Albion & Fogarty, 2005; Lally, 2007; Lally & Kerr, 2005; Miller & Kerr, 2003).

Athletic Identity in Relation to Transition Out of Sport

Sport transitions are often times of loss. Examples include a loss of ability, an injury, a loss of place on a team (deselection), or retirement (Brewer et al., 1999). Additionally, free choice is not often associated with these transitions as injury, deselection, and forced retirement are the most common exits of elite athletes causing significant negative effects on their identity (Webb et al., 1998). Times of injury are volatile experiences for many athletes as an important, possibly the primary component of their identity is taken away. As a matter of self-preservation, many begin to distance themselves from their athletic identity following injury (Brewer et al., 2010; Brewer et al., 1999). Likewise, deselection either by being cut from a team, not advancing to the next higher competitive level, or even losing a starting spot in a lineup can cause athletes

to intentionally separate themselves from their athlete role to prepare for a time of transition (Brewer et al., 1999; Grove et al., 2004).

Finally, the most common transition topic studied in relation to athletic identity is retirement. Athletic identity is shown to have a significant level of effect on the retirement transition of elite athletes (Alfermann et al., 2004; Baillie & Danish, 1992; Brewer et al., 1999; Cutler, 1994; Lally, 2007; Lavalley et al., 1997; Webb et al., 1998). The higher the athletic identity level of the athlete pre-retirement the more difficult the transition is out of sport (Alfermann et al., 2004; Baillie & Danish, 1992; Cutler, 1994; Webb et al., 1998). One major factor involved with sport retirement is the loss of the social network. Those who associate exclusively with the athlete role are likely highly dependent on their athletic peers and suffer in isolation when they transition out of sport (Cutler, 1994; Lavalley et al., 1997). Individuals who intentionally plan for a move out of sport, though, tend to suffer fewer negative consequences from the transition (Lally, 2007). Lally (2007) found that college student-athletes who were intentional about de-emphasizing their athletic role during their final year of competition did not suffer an identity crisis after sport retirement. These students expanded their focus by developing interests in academic and career pursuits to prepare for the transition. Finally, Baillie and Danish (1992) write that preretirement counseling must be a component of effective interventions for transitioning athletes, giving them an opportunity to face the realization of life without sport.

Measuring Athletic Identity

A few instruments and scales exist to measure how an individual identifies with the athlete role. Nasco and Webb (2006) developed the Public-Private Athletic Identity

Scale (PPAIS) as a way to assess how the public versus private roles of an athlete affects their behavior. Next, Anderson et al. (2007) created the Athletic Identity Questionnaire (AIQ) exclusively for adolescents and it measures four distinct factors: appearance, competence, importance of the activity, and encouragement from parents, other adults and friends. More recently, the Academic and Athletic Identity Scale developed by Yukhymenko-Lescroart (2014) evaluates the two dominant roles of student-athletes. The 11-item scale includes five academically related questions and six questions based on sport (Yukhymenko-Lescroart, 2014). Finally, the 10-item Baller Identity Measurement Scale (BIMS) presented in the research of Harrison et al. (2014) is very similar to the well-known AIMS in that it focuses on the athlete's perception of himself or herself in the singular role of athlete. Finally, the first instrument to measure the concept of athletic identity is the AIMS published in 1993 by Brewer et al. and it has become a mainstay for scholars in this area. In fact, Ronkainen et al. (2016) completed a recent meta-study on athletic identity research in the field of sports psychology finding that 54 of the 68 quantitative and/or mixed method studies utilized the AIMS.

Athletic Identity Measurement Scale

Brewer et al. (1993) first developed AIMS in their influential work, "Athletic identity: Hercules' muscles or Achilles heel?" In this paper, they introduced a 10-item scale to measure athletic identity that included a Likert scale ranging from 1-7 for a maximum score of 70. In 2001, Brewer and Cornelius reduced the AIMS survey to a 7-item instrument (maximum score of 49) with questions falling into three distinct subsections: social identity, exclusivity, and negative affectivity. This newer version has a test-retest reliability of $r = .89$ and an internal consistency of $\alpha = .81$ (Brewer &

Cornelius, 2001). Additionally, statistical norms were found for males ($M = 39$) and females ($M = 38$) (Brewer & Cornelius, 2001). AIMS has been used in a wide variety of studies from determining athletic identity by sport level and cultural popularity (Rasquinha & Cardinal, 2017) to evaluating NCAA divisional differences in athletic identity (Huml, 2018) to retrospective studies examining changes in athletic identity (Houle et al., 2010) to career planning attitudes based on athletic identity (Tyranee et al., 2013) to athletic identity and transition out of sport (Russell et al., 2018).

The AIMS instrument was used in this study for a few reasons. First, the instrument is only focused on athletic identity. While other instruments seek to capture information on additional topics such as academic identity (Academic and Athletic Identity Scale, Yukhymenko-Lescroart (2014)) or are focused exclusively on a specific age group like adolescents (AIQ, Anderson et al. (2007)), the AIMS' sole focus is athletic identity. Secondly, it is very approachable for university students with just seven easy-to-understand questions. Next, it provides a simple 7-49 point score which is easy to decipher and to use in statistical measurements as a dependent variable. Finally, the AIMS is the first and most widely recognized instrument in the field of study. Therefore, the results of this study could be more easily compared with and analyzed in concert with the many previous studies which have utilized AIMS.

Summary

It has been determined that how a collegiate student-athlete identifies with their athletic role affects a wide range of factors. Studies have shown athletic identity influences athletic performance (Anderson et al., 2009; Cutler, 1994; Horton & Mack; Lavallee et al. 1997), academic performance (Adler & Adler, 1991; Antshel et al., 2016;

Beron & Piquero, 2016; Bimper, 2014; Foster & Huml, 2017; Hale & Waalkes, 1994; Melendez, 2009-2010; Miller & Kerr, 2003; Sturm et al., 2011), career development (Albion & Fogarty, 2005; Brown et al., 2000; Grove et al., 1997; Houle & Kluck, 2015; Linnemeyer & Brown, 2010; Murphy et al., 1996; Tyrance et al., 2013), and transitions within and out of sport (Alfermann et al., 2004; Baillie & Danish, 1992; Brewer et al., 1999; Brewer et al., 2010; Cutler, 1994; Grove et al., 2004; Lally, 2007; Lavallee et al., 1997; Webb et al., 1998).

Though some studies have evaluated athletic identity differences across NCAA divisions (Beron & Piquero, 2016; Griffith & Johnson, 2002; Huml, 2018), there appears to be a lack of published empirical literature on the potential differences of athletic identity levels between native and transferring student-athletes, especially ones who transfer from one level to another. Studies focusing on intramural versus varsity athletes found that as sport level increases, athletic identity increases (Good et al., 1993; Lamont-Mills & Christensen, 2006), and Rasquinha, and Cardinal (2017) found that athletic identity is positively associated with the perceived cultural significance of the respective sport. Therefore, transferring to a “higher” or “lower” division could cause a change in athletic identity levels due to factors including, but not limited to, increases or decreases in: athletic scholarships, media exposure, the cultural significance or prestige of the sport/level one participates in, and the perceived opportunity to play professionally. These sources regarding athletic identity and transfer student-athletes will inform the present study as it intends to evaluate potential differences in athletic identity between transfer and native student-athletes. The following chapter will discuss the methodology for the current study.

CHAPTER 3: METHODOLOGY

The purpose of this study was to measure, compare, and analyze the athletic identity of NCAA student-athletes who transferred to their current institutions versus the athletic identity levels of their current fellow student-athletes who did not transfer (native students) as well as to investigate whether the COVID-19 pandemic played a role in athletic identity. A variety of variables were collected and examined including sport, year in school, ethnicity, self-reported academic experience, transfer status (native vs transfer), previous institutional/divisional level, current NCAA divisional level, reason for transfer, athletic identity level, and COVID-19 impact. This chapter describes the research questions, research design, sampling, survey instrument, variables, procedures, and statistical analyses.

Research Questions

The following research questions will guide this study.

RQ1: Is there a relationship between the impact of COVID-19 on commitment to sport and athletic identity? If so, is it moderated by transfer status?

RQ2: Is there a significant difference in the athletic identity levels (per AIMS score) of student-athletes based on transfer status (transfer or native), current NCAA division, and various demographic variables?

RQ3: Is there a significant difference in the athletic identity levels (per AIMS score) of transfer student-athletes based on their transfer type (2-4 or 4-4) and various demographic variables?

Research Design

The study was quantitative, descriptive, and non-experimental. The dependent

variable (AIMS score) results in measurable data for SPSS analysis. The analysis sought to identify a potential statistical association between an athletic identity score and multiple variables, most notably transfer status and the pandemic. Though the methods employed in this study cannot prove a direct cause and effect relationship between athletic identity and any variable, the advantages of this method are many including the ability to survey a larger sample size and provide generalizable results. The study was descriptive in nature as multiple variables were collected which provide insight into this unique population.

This specific research design was selected for four primary reasons. First, quantitative studies that use a simple survey instrument can be quickly distributed to numerous institutions and potentially hundreds of student-athletes by email and a large sample is desired for this study. Secondly, the AIMS instrument produces an exact number score for the dependent variable that can be used in a regression model to enable efficient analysis of multiple variables and research questions. Third, AIMS is an established and verified instrument commonly used for studying athletic identity levels of collegiate student-athletes (Ronkainen et al., 2016). Lastly, from a feasibility standpoint, gaining one-on-one access to student-athletes can be difficult and time-consuming; therefore, a survey instrument that can be completed quickly online and anonymously is most efficient and likely to produce results.

Researcher's Role

The research questions and hypotheses are original to this study and were created to analyze the athletic identity levels of collegiate student-athletes who transferred to their current institution in comparison to those who had not. The instrument was a

combination of demographic questions, questions specifically targeting student-athletes who transferred, the 7-item AIMS instrument, and two COVID-19 related questions (one Likert scale, one open ended). The additional demographic and pandemic related questions were selected by the researcher specifically for this study creating a one-of-a-kind survey instrument (Appendix B).

The researcher had sole responsibility during the entirety of the project from developing research questions and creating the survey instrument, to making contacts at prospective institutions, to gathering and organizing data. In regards to the administration of the survey instrument, the researcher took full responsibility in soliciting sites, establishing a “point person” on each campus and completing all necessary IRB approval in advance of the study. Finally, the researcher utilized the SPSS program to analyze the data.

Positionality

The researcher has worked with Division I student-athletes since 2000 and as a full-time athletic academic advisor since 2002. As an advisor, he has worked one-on-one with hundreds of student-athletes from recruitment through graduation, and the advisor role has given him insight into student-athletes at the Division I level that most researchers are not exposed to and is both an advantage and a disadvantage.

The advantages gained from the athletic academic advisor role concerning this study included familiarity with athletic departments, NCAA student-athletes, and transfer student-athletes specifically. Additionally, the researcher has contacts across the country who will provide access to this unique population at their respective institutions. Potential disadvantages of the researcher’s close ties to the field include biases about

transfer student-athletes. Preconceived biases of the researcher include that a majority of transfer student-athletes choose to transfer for athletic reasons and likely have high athletic identity levels. The personal history experienced by the researcher with this population helped determine research questions and hypotheses as well as impacted the design of the study, the perceptions of the data, and the conclusions drawn.

Protection of Human Subjects

Ethical research requires the protection of human subjects. In this study the participants who complete the survey instrument were not harmed in any fashion and received no direct benefit. The study followed normal educational practices and did not adversely impact the participants' educational pursuits. Each full participant electronically signed an informed consent form acknowledging their willing participation in the study for research purposes. Additionally, all participants at each institution were sent the same survey link. Therefore, the researcher was unable to identify which survey results came from which school let alone be able to identify specific student-athlete responses making it truly anonymous. This process ensured the integrity of the data and protected all participants, especially students at the institution of the researcher. As evidence of this ethical commitment, the researcher completed the Institutional Review Board process at the home institution. Due to the anonymous nature of the survey instrument and the inability to connect specific survey results back to specific campuses, separate IRB approval was not required at each participating institution. The findings of this study provide professionals who work with student-athletes a greater understanding of the concept of athletic identity for this important and growing transfer student-athlete population.

Sampling: Institutional Level Criteria

As this study sought to gain insight into a wide range of student-athletes attending different types of institutions, a diverse group of sample institutions was required.

Institutions were recruited from each of the NCAA's divisions and from each of the three Division I subdivisions. Additionally, a mix of football playing and non-football playing schools were recruited from Division II and Division III. Both public and private institutions were recruited to be part of the sample. Finally, to increase the diversity of the sample, schools with differing enrollment sizes per Carnegie classification were solicited (Carnegie, 2019).

Gaining access to student-athletes is sometimes challenging as athletic departments are protective of their students and research requests are frequent. Negotiating access with "gatekeepers" at institutions was vital. The researcher had personal contacts at many institutions through active participation in the professional organization for athletic academic advisors, the National Association of Academic and Student-Athlete Development Professionals (N4A). The research sub-committee of the N4A provides a process whereby members can gain approval to send survey instruments for academic research to the organization's list serve for distribution on their campuses. The researcher utilized this opportunity. The sampling method was "convenience" in this regard.

Though institutional identities will not be divulged, seventeen institutions agreed to send the survey link out to at least some portion of their student-athlete population. Efforts were made to strategically recruit diverse institutions. In addition, a generic link was provided to the N4A list serve in the recruitment letter. Therefore, it is possible that

additional NCAA student-athletes were made aware of the study and participated. A list of these schools by divisional level, institution type, and Carnegie classification are included in Table 3.

Table 3

Institutions Who Distributed the Survey by Type

NCAA Divisional Level	Institution Type	Enrollment per Carnegie Classification
Division I (FBS, "Power 5")	Public	Large
Division I (FBS, "Power 5")	Public	Large
Division I (FBS, "Power 5")	Public	Large
Division I (FBS, "Group of 5")	Public	Large
Division I (FBS, "Group of 5")	Public	Large
Division I (FCS)	Private	Medium
Division I (I-AAA/non-football)	Public	Large
Division I (I-AAA/non-football)	Private	Large
Division I (I-AAA/non-football)	Public	Large
Division I (I-AAA/non-football)	Public	Medium
Division II (football)	Private	Small
Division II (football)	Private	Small
Division II (non-football)	Public	Medium
Division II (non-football)	Private	Small
Division III (football)	Private	Small
Division III (non-football)	Private	Large
Division III (non-football)	Private	Very Small

Sampling: Participant Level Criteria

The study focused on current NCAA student-athletes therefore all participants were current NCAA student-athletes. Varsity student-athletes, no matter the sport, were encouraged to participate in the study regardless of whether or not they had transferred. Though many college students could have some level of athletic identity due to past sports participation or current involvement in club or intramural athletic programs, this research focuses on intercollegiate varsity student-athletes participating in Division I, II

or III. Previous research on this unique population involving athletic identity levels has proven useful in identifying trends regarding major selection (Foster & Huml, 2017), career development (Brown et al., 2000; Houle & Kluck, 2015; Tyrance et al., 2013), and separation from sport difficulties (Alfermann et al., 2004; Brewer et al., 1999; Cutler, 1994; Webb et al., 1998). Yet, there is no known scholarly research which specifically analyzes the athletic identity levels of transfers versus native student-athletes.

Additionally, there are few known published studies regarding the influence of the COVID-19 pandemic on athletic identity levels of current NCAA student-athletes. All student-athletes of all sports, genders, ethnicities, class, and academic standing will be invited to participate. At the participant level, the sampling method is convenience based on whichever students choose to respond to the survey (Mertens, 2015).

Transfers are prevalent. Since 2003, approximately 10% of all Division I women's rosters and approximately 15% of all Division I men's rosters are made up of student-athletes who have transferred (NCAA, 2020c). Division II institutions typically see even more transfers with approximately 14% of all women's rosters and 21% of all men's rosters are comprised of transfer students (NCAA, 2020b). Therefore, the expectation was that a sufficient sample of transfer and native student data would be available for the study at the chosen campuses.

Data Collection

After IRB approval in spring 2021, the researcher directly contacted 23 potential institutional sites to inquire about the possibility of surveying their student-athlete population in late spring 2021. Additionally, a request for participant institutions was sent to the National Association of Academic and Student-Athlete Development Professionals

(N4A) list serve. By April 1, 2021 each “gatekeeper” was provided a letter outlining the purpose of the study, a copy of the IRB approval, and a sample survey to review. Based on conversations with each of the institutional contacts, a specific start date for the study was decided and advertised as open for 30 days. The survey link was sent directly by the researcher to the contact person to distribute from their institutional email. Each institution received the same survey link to protect anonymity.

Survey Instrument

As the research surrounding athletic identity has increased in recent years, the number of dedicated instruments to measure the concept have grown. Instruments found in the literature include the Athletic Identity Questionnaire (AIQ-Adolescent) (Anderson et al., 2007), the Academic and Athletic Identity Scale (Yukhymenko-Lescroart, 2014), the Baller Identity Measurement Scale (Harrison et al., 2014), and the popular AIMS.

The Athletic Identity Measurement Scale (AIMS) is the most prevalent instrument in literature today and was co-developed by the scholars who wrote the seminal definition of “athletic identity.” The original AIMS was a 10-item survey introduced by Brewer et al. (1993). In 2001, the AIMS was revised into a 7-item survey by Brewer and Cornelius. As evidence of its prominence in research a recent meta-study on athletic identity research found that 54 of 68 quantitative and/or mixed methods studies utilized AIMS (Ronkainen et al., 2016). The current study used the 7-item AIMS scale but also included demographic questions regarding sport, year in school, ethnicity, self-reported academic experience, transfer status (native vs transfer), previous institutional/divisional level, current NCAA divisional level, and reasons for transfer as part of a larger instrument.

Variables

Several variables will be collected and analyzed in the study. The dependent variable is the AIMS score (range 0-49). Independent variables to be examined in regards to the research questions include sport, year in school, ethnicity, self-reported academic experience, transfer status (native vs transfer), previous institutional/divisional level, current NCAA divisional level (later combined into groupings of 2-4 transfers and 4-4 transfers, reason for transfer and COVID-19 impact (Table 4). Of note, the survey asked each respondent to select the sport they participated in per NCAA terms (e.g. men's basketball, women's tennis, etc.) therefore self-identified gender data was not collected but later during analysis a new variable was created for male sports and female sports to improve analysis due to the variety of the sports represented. Finally, two COVID-19 related questions were part of the instrument. Information concerning the impacts of the pandemic on students' commitment to and view of athletics were collected using the final two questions on the survey. The Likert-scale data was used as an independent variable in the analysis for all three research questions. Also, the free response data was used to give greater context of the general impact of COVID-19 on the broader study.

Table 4

Variables

Variable	Level of Measurement	Definition/Value
Sport Gender	Nominal	Male and Female sports
Year in School	Ordinal	1 st year/Freshman, Sophomore, Junior, 4 th year Senior, 5 th year senior, Graduate student/2 nd degree seeker

Race/Ethnicity	Nominal	African-American, Asian or Pacific Islander, Hispanic or Latinx, Native American or American Indian, White, Two or more, Non-U.S./International
Self-reported previous academic experiences	Ordinal	Very positive, Positive, Somewhat positive, Somewhat negative, Negative, Very negative
Transfer Status	Nominal	Transfer student or Native student
Previous Level	Nominal	Division I, Division II, Division III, NAIA, JUCO/community college, Foreign institution
Current Level	Ordinal	Division I, Division II, Division III
Reason for Transfer	Nominal	Academic reasons, Athletic reasons, Medical reasons, Financial reasons, Personal and/or family reasons
Self-reported impact of pandemic on sport commitment	Ordinal	Strongly Agree, Agree, Neither Agree or Disagree, Disagree, Strongly Disagree
AIMS Score	Interval	0 – 49

Statistical Analysis Procedures

An SPSS data file was developed with categories responding to each of the survey questions and a coding pattern was created for nominal variables, such as sport, year in school, ethnicity, self-reported academic experience, previous institutional/divisional level, current NCAA divisional level, reason for transfer and COVID impact. Survey data was uploaded to the file, and a scan for missing data was performed seeking incomplete surveys or other errors. The original data file contained results from 448 respondents. The

following respondents were removed from the data set before analysis: 21 participants who completed the demographic portion of the survey but none of the AIMS questions, 13 participants who marked yes that they agreed to take the survey but did not answer any further questions, and one student who marked “no” on the consent form. This resulted in a total of 413 who answered all questions or all but the free response COVID question. Next, a test for outliers using boxplots was performed. After review all outliers remained in the data set. Finally, descriptive statistics were conducted to determine the sub-set sample sizes per various attributes, such as sport to determine if the subsets are large enough to use for required statistical analyses. Two variables grouped together to aid the statistical analysis were Sport and Transfer Type. The 413 respondents participated in 26 different sports. These responses were therefore simplified into male sports teams and female sports teams. Next, there were 18 response options available for Transfer Type in the survey. These responses were recoded to either two-year college transfer or four-year college transfer and used as an independent variable in research question 3. Transfers were grouped in these distinctive groups as this is an industry standard way of referring to NCAA transfer student-athletes. There are NCAA specific rules that differ between two-year and four-year transfers.

A General Linear Modeling (GLM) – Univariate was used as the central statistical analysis using the common dependent variable (AIMS score) and the various independent variables. GLM-Univariate is akin to an ANCOVA with a combination of ANOVA and regression analysis used to assess how independent variables predict dependent variables (Statistics How To, 2022).

Research question one used the entire sample and the independent variables of Transfer Status and the COVID-19 variable and sought to assess if either influenced the AIMS scores as well as testing whether or not an interaction between these two variables occurred. Research question two also used the entire sample and focused on determining if a relationship existed between AIMS score and if a student-athlete had transferred or not. Independent variables used in research question two were current NCAA division, sport gender, race/ethnicity, overall academic experience, transfer status and commitment to sport based on COVID. Finally, Research question three included only the transfers and looked specifically at potential differences in AIMS per transfer type (2-4 vs 4-4). A summary of the research questions and statistical analyses is included in Table 5.

Table 5

Summary of Research Questions with Variables and Statistical Analyses Procedures

Research Question	Independent Variables	Dependent Variable	Data Analysis Method
RQ1: Is there a relationship between the impact of COVID-19 on commitment to sport and athletic identity? If so, is it moderated by transfer status?	Transfer status, Commitment to sport based on COVID	AIMS score	Descriptive statistics, GLM-Univariate
RQ2: Is there a significant difference in the athletic identity levels (per AIMS score) of student-athletes based on transfer status (transfer or native), current NCAA division, and various demographic variables?	Current division, Sport Gender, Race/ethnicity, Overall academic experience, Transfer status, Commitment to sport based on COVID	AIMS score	Descriptive statistics, GLM-Univariate

RQ3. Is there a significant difference in the athletic identity levels (per AIMS score) of transfer student-athletes based on their transfer type (2-4 or 4-4) and various demographic variables?	Current division, Sport gender, Race/ethnicity, Overall academic experience, Transfer type, Commitment to sport based on COVID	AIMS score	Descriptive statistics, GLM-Univariate
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Validity and Reliability

The concepts of reliability, validity, and objectivity are important to consider for the study. The 7-item AIMS has a test-retest reliability of Pearson's $r = .89$ (Brewer & Cornelius, 2001), showing it as a reliable measure as it is close to 1.00 (Mertens, 2015). Next, the AIMS has an internal consistency of $\alpha = .81$ (Brewer & Cornelius, 2001), which is higher than the prescribed "better" measure of .80 (Statistics Solutions, 2019). Also, statistical norms have been established with males averaging 39 out of 49 and females averaging 38 out of 49 on the 7-item AIMS (Brewer & Cornelius, 2001). Another validity indicator is the typical increase of AIMS scores by athletes in concert with an increase in their sport involvement level (Good et al., 1993; Lamont-Mills & Christensen, 2006; Rasquinha & Cardinal, 2017). Additionally, previous results show that current NCAA student-athletes scored significantly higher on the AIMS than non-student-athletes (Brewer & Cornelius, 2001). Therefore, the AIMS has shown to be an effective measure of athletic identity. Lastly, to ensure objectivity, the directions for the survey will be clear and concise and need no further instructions thus eliminating the need for additional instruction and potential bias from administrators at each school.

Limitations

As with any study, limitations are present. First, the participants were not randomized as the researcher solicited institutions based on specific characteristics and

known contacts at different institutions. Therefore, the sampled institutions may not be representative of all NCAA institutions. Also, the study includes a relatively small sample in comparison to the total number of student-athletes competing nationally. Additionally, there was a possibility that students will not understand some or all of the survey questions and the characteristics of the student-athletes who chose not to participate will be unknown. Next, AIMS is just one measure of athletic identity and as a self-reported, one-time survey it is possible that scores could fluctuate depending upon the day, their physical status (injured or not), if they were in or out of season of play, and a variety of other reasons including the effects of the worldwide pandemic of 2020-2021. Also, research question three focused on the transfer type. Common transfer situations in NCAA athletics involve those coming from a two-year institution (vertical transfer) and those transferring in from a four-year college (lateral transfer). Each transfer type has specific NCAA eligibility legislation to meet eligibility standards. Therefore, comparing these two groups in the statistical analysis makes the most sense from an industry perspective. Also, since the survey responses were anonymous the specific institution each respondent attended is not known. Therefore, analysis cannot be completed that could quantify potential institutional effects which may play a role in AIMS scores. Finally, the COVID-19 pandemic was handled differently by institutions based on division, conference, institutional, state and local government, and university regulations. It is unknown if the students who responded to the survey in late spring of 2021 participated in their sport during the spring of 2020 or during the 2020-2021 academic year. A timeline of the Transfer Portal implementation, the pandemic, and additional events that could impact the present study are included in Appendix A.

Summary

Chapter three described the research questions, research design, sampling process, survey instrument, variables, and statistical analyses of the current study which measures the athletic identity levels of NCAA student-athletes (per AIMS score) in reference to a variety of variables, most importantly transfer status. Due to the academic and transition-related struggles of some transfer student-athletes, this research is meaningful and could give insight into how to best help this growing population. Research into athletic identity levels of transfers will allow for transfer-specific psychological, career, and academic programming. The results of this study will allow advisors, psychologists, coaches, and athletic administrators to serve and equip these students to better handle transition.

CHAPTER 4: RESULTS

This study sought to investigate the how the athletic identity of NCAA student-athletes was influenced by a variety of variables including transfer status and the effects of the global COVID-19 pandemic. Additional variables in the analysis included sport, year in school, ethnicity, self-reported academic experience, previous institutional/divisional level, current NCAA divisional level, and reason for transfer (if applicable). Chapter four outlines the findings of the data analysis.

Sample Description

There were 413 respondents who completed the survey in its entirety and were included in the analysis. The sample included 346 native student-athletes and 67 transfer student-athletes who participated in 26 different sports. Due to the number of sports, the respondents were later grouped into those participating on men's teams and those participating on women's teams as defined by the NCAA. Additionally, there are 18 different transfer types in the sample. Some examples include those who transferred from a junior college to a Division II institution or a Division III college to a Division I university or a Division III institution to another Division III institution. These students were later grouped into those who transferred from a two-year school (2-4) and those who transferred from a four-year institution (4-4) for analysis.

Respondents were overwhelmingly from Division I (66%) versus Division II (21%) and Division III (13%). Native student-athletes were the largest part of the sample (84%) with transfers making up 16% of the respondents. Also, a majority of the sample indicated that they were part of a women's sports team (68%) versus a men's sports team (32%). The teams with the most representation in the sample were Women's Soccer

(14.0%) and Softball (13.3%). The sample was largely White/Caucasian (67.1%) with the second-largest ethnicity being African-American (16.5%). Nearly all student-athletes noted that they had a good overall academic experience at their current institution with 95.4% replying that their experience was at least a “somewhat positive”. Lastly, the sample was evenly distributed based on year in school; first year (25.4%), sophomore (20.3%), junior (26.2%), seniors and graduate students (28.1%). This data with the respective AIMS means and standard deviations per group is represented in Table 6.

Table 6

AIMS Scores per Selected Variables, Entire Sample

Variable	<i>n</i>	%	AIMS <i>M</i>	<i>SD</i>
NCAA Division				
Division I	274	66.0	37.58	6.91
Division II	87	21.0	38.56	6.52
Division III	52	13.0	37.38	6.96
Transfer Status				
Native (non-transfer)	346	84.0	37.38	6.76
Transfer	67	16.0	39.78	6.86
Sport Gender				
Men's Sports Teams	134	32.0	38.43	7.55
Women's Sports Teams	279	68.0	37.44	6.45
Self-Identified Race/Ethnicity				
White	277	67.1	37.77	6.34
African-American	68	16.5	37.96	6.63
Two or more	26	6.3	36.96	9.82
Non-U.S./International	19	4.6	37.05	9.35
Hispanic or Latinx	16	3.9	39.50	7.82
Asian or Pacific Islander	4	1.0	36.00	4.90
Native American/American Indian	3	0.1	37.33	7.64
Academic Experience - Current Institution				
Very positive	106	25.7	36.96	7.75
Positive	199	48.2	37.89	6.32
Somewhat positive	89	21.5	37.80	6.94
Somewhat negative	16	3.9	40.63	5.60
Negative	1	0.2	45.00	

Very negative	2	0.5	39.50	6.83
Self-Identified College Status				
1st year/Freshman	105	25.4	38.88	6.14
Sophomore	84	20.3	37.63	6.77
Junior	108	26.2	38.26	6.26
4th year Senior	79	19.1	35.63	8.10
5th year Senior	17	4.1	38.35	6.72
Graduate student/2nd degree seeker	20	4.8	37.75	7.01
Total	413	100.0	37.77	6.83

The 67 transfers who participated in the study were not unlike the overall population. They were mostly from Division I (72%) versus Division II (19%) and Division III (9%). Transfers were also largely from women's sports teams (61%) versus men's teams (39%). They were mainly White/Caucasian (77.6%) with the second-largest ethnicity being African-American (10.4%). Additionally, 70.1% of the transfers were 4-4 transfers while 29.9% were 2-4 transfers. The direction of the transfers in the study is also of note as 47.8% of the student-athletes did not change NCAA divisions while 40.3% went "up" (74.1% of these were 2-4 transfers). The remaining eight student-athletes transferred "down" to a lower NCAA division. Finally, in concert with previous research (NCAA, 2016), 62.7% of transfers in the study marked that they transferred for "athletic reasons" (Table 7). The next most popular reasons were "personal and/or family reasons" (14.9%) and "academic reasons" (11.9%). This data with the respective AIMS means and standard deviations per group is represented in Table 7.

Table 7

AIMS Scores per Selected Variables, Transfers Only

Variable	<i>n</i>	%	AIMS <i>M</i>	<i>SD</i>
NCAA Division				
Division I	48	71.6	39.31	7.26

Division II	13	19.4	40.85	5.19
Division III	6	9.0	41.17	5.64
Sport Gender				
Men's Sports Teams	26	38.8	38.69	6.86
Women's Sports Teams	41	61.2	40.46	6.86
Race/Ethnicity				
White	52	77.6	39.3	7.06
African-American	7	10.4	39.9	8.03
Two or more	4	6.0	42.8	3.77
Non-U.S./International	2	3.0	45.0	1.41
Hispanic or Latinx	1	1.5	44.0	
Asian or Pacific Islander	1	1.5	36.0	
Native American/American Indian	0			
Transfer Types				
2-4 Transfers	20	29.9	39.50	6.18
4-4 Transfers	47	70.1	39.89	7.06
Transfer Direction				
Up	27	40.3	38.33	6.55
No Change	32	47.8	40.41	7.20
Down	8	11.9	42.13	4.68
Reasons for Transfer				
Athletic	42	62.7	40.24	6.86
Personal/Family	10	14.9	39.4	5.76
Academic	8	11.9	40.75	5.39
Medical (Physical/Health)	4	6.0	34.25	13.15
Financial	3	4.5	39.33	3.06
Total	67	100.0	39.78	6.86

The academic experience of the student at both the previous and current institution can play a role in the overall success or failure of the student academically and athletically. The transfers in this study noted that they had a positive or very positive “academic” experience at their previous school (64.2%), and 77.6% noted that they had a positive or very positive “academic” experience at their new institution. From an overall transfer experience perspective, 76.1% of student-athletes noted that they had a positive or very positive experience with only 3.0% (2 student-athletes) responding they had a

negative or very negative transfer experience. Data from the student-athlete's transfer experience and corresponding AIMS means and standard deviations are included in Table 8.

Table 8

AIMS Scores per Transfer Experiences Variables

Variable	<i>n</i>	%	AIMS <i>M</i>	<i>SD</i>
Academic Experience - Previous Institution				
Very positive	17	25.4	39.76	6.68
Positive	26	38.8	39.69	5.97
Somewhat positive	17	25.4	39.35	8.67
Somewhat negative	3	4.5	43.33	6.35
Negative	3	4.5	37.33	7.78
Very negative	1	1.5	46.00	
Academic Experience - Current Institution				
Very positive	23	34.3	38.78	8.25
Positive	29	43.3	40.34	5.47
Somewhat positive	12	17.9	39.42	7.83
Somewhat negative	2	3.0	42.50	4.95
Negative	1	1.5	45.00	
Very negative	0			
Overall Transfer Experience				
Very positive	19	28.4	38.26	8.61
Positive	32	47.7	39.66	6.01
Somewhat positive	8	11.9	44.13	2.95
Somewhat negative	6	9.0	39.17	8.82
Negative	1	1.5	39.00	
Very negative	1	1.5	42.00	
Total	67	100.0	39.78	6.86

This sample is likely not reflective of NCAA student-athlete demographics nationally as it is predominately Caucasian, female, Division I, and comprised of native students who, for the most part, have had a positive academic experience. The transfers in the sample mimic these attributes.

Findings

The findings for each research question will be discussed with accompanying tables.

Research Question 1

Is there a relationship between the impact of COVID-19 on commitment to sport and athletic identity? If so, is it moderated by transfer status?

To test this research question, a GLM-Univariate test using Type III error was run with SPSS software version 27 and found that the corrected model was significant with ($F(13, 399) = 11.187, p < .001$). Additionally, both transfer status (transferred or had not transferred) (survey question 8; $F(1, 399) = 8.369, p = .004$) and the COVID-19 commitment to sport variable (survey question 20; $F(6, 399) = 8.530, p < .001$) were found to be significant predictors of AIMS scores. Yet, the interaction of transfer status and the COVID-19 variable in research question one was not significant ($F(6, 399) = 0.997, p = .427$). Hence student perceptions of the impact of the pandemic were associated with athletic identity scores of the student-athletes in this study, but these perceptions were inconsistent across the two groups. Collectively, inclusion of these factors accounted for 26.7% ($R^2 = .267$) of the variance in AIMS scores. These findings are displayed in Table 9.

Table 9

Research Question 1 – ANOVA Table

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Corrected model	5133.79	13	394.91	11.187	< .001*
Transfer status	295.42	1	295.42	8.370	.004*
COVID, commitment to sport	1806.72	6	301.12	8.530	< .001*
Interaction of variables	211.22	6	35.20	0.997	.427

*Note: Significant at the $p < .05$ level.

Beyond just significance of the factor, an additional noteworthy finding is the generally positive association between commitment level per the COVID-19 variable and AIMS scores, which for the most part held uniformly through the range of ratings. Whereas when commitment to sport increased during the pandemic, AIMS scores increased. Likewise, overall, as commitment to sport during the survey period waned, AIMS scores decreased (Table 10).

Table 10

As a Result of the COVID-19 Pandemic, My Commitment to Athletics Was Strengthened

	<i>n</i>	%	AIMS <i>M</i>	<i>SD</i>
Strongly disagree	32	7.7	28.94	10.40
Disagree	20	4.8	34.30	7.12
Somewhat disagree	41	9.9	35.63	6.46
Neutral	84	20.3	37.17	5.68
Somewhat agree	96	23.2	38.06	5.63
Agree	55	13.3	39.78	4.38
Strongly agree	85	20.6	41.88	4.72
Total	413	100.0	37.77	6.83

In general, the transfers in the study were similar and showed a generally positive association between their commitment to sport during the pandemic and their athletic identity scores (Table 11).

Table 11

As a Result of the COVID-19 Pandemic, My Commitment to Athletics Was Strengthened, Transfers Only

	<i>n</i>	%	AIMS <i>M</i>	<i>SD</i>
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Strongly disagree	5	7.5	35.00	12.02
Disagree	3	4.5	36.67	11.37
Somewhat disagree	6	9.0	38.67	6.53
Neutral	14	20.9	37.93	7.42
Somewhat agree	17	25.4	41.06	5.92
Agree	7	10.4	39.71	5.41
Strongly agree	15	22.4	42.73	4.22
Total	67	100.0	39.78	6.86

A post hoc analysis was conducted for both significant independent variables in research question one. For transfer status with only two options (transfer or native student), an estimated marginal means was run on SPSS. Transfer status was found to be a significant predictor of AIMS scores in this model ($p = .004$) and the estimated marginal means reflected this finding. In particular, the mean AIMS score for the native students ($M = 36.11$, $SE = 0.37$) was smaller than the mean AIMS score for the transfer students ($M = 38.82$, $SE = 0.87$).

Next, to interpret the significant effect of the COVID-19 variable, Tukey tests of pairwise comparisons were conducted between the seven options for students to select (strongly agree to strongly disagree). There were twelve significant pairs with p values ranging from $<.001$ to $.027$ shown in Table 12 and as a chart in Appendix C. The positive association between those who answered that the pandemic strengthened their commitment to sport and increased AIMS scores is evident.

Table 12

Tukey Results, Pairwise Comparison of COVID-19 Variable

Pair	Mean Difference	SE	P	95% Confidence Interval	
				Lower Bound	Upper Bound
2, 1	5.36	1.69	.027	0.34	10.38
3, 1	6.70	1.40	<.001	2.54	10.85

4, 1	8.23	1.23	<.001	4.57	11.89
5, 1	9.13	1.21	<.001	5.53	12.72
6, 1	10.84	1.32	<.001	6.93	14.76
6, 2	5.48	1.55	.008	0.88	10.08
6, 3	4.15	1.23	.014	0.51	7.78
7, 1	12.94	1.23	<.001	9.29	16.60
7, 2	7.58	1.48	<.001	3.21	11.96
7, 3	6.25	1.13	<.001	2.90	9.60
7, 4	4.72	0.91	<.001	2.01	7.42
7, 5	3.82	0.88	<.001	1.20	6.44

In addition to the quantitative data collected on the influence of COVID-19, the survey also asked an open-ended question, “Describe in your own words how the COVID-19 pandemic influenced the way you view the importance of sport in your life.” Of the 413 participants, 293 (70.9%) responded. The responses ran the gamut from overly positive to overly negative and from heartfelt and warm to sad and unfortunate. The responses revealed that some student-athletes had made peace with the cancellation of a season and were ready to end their careers as well as those who took the time away to assess their goals and future and discover new identities and then some who were clearly upset about the loss they endured due to cancelled seasons. To facilitate interpretation of the open-ended responses, similar responses across participants were noted and primary themes emerged: acknowledgement of life outside of sport, a recommitment to sport in the face of adversity, and mental health issues.

Many student-athletes used the early days of the pandemic, when isolation was a mainstay, to reflect on what life would be without sport. Some were obviously upset and feeling immense loss, “when we were sent home due to the pandemic, I felt as though I had lost myself and I did not know what to do. No one truly understood what it was like” (DII, Softball, AIMS: 30). Others developed new interests and hobbies, “COVID-19

showed me that there is much more to life than being an athlete” (DII, Women’s Soccer, AIMS: 15), and the pandemic “made me view sports as less important because I was able to learn what I like about myself outside of the sport” (DII, Women’s Basketball, AIMS: 35). Another explained how COVID-19 “opened my eyes to what my life will be like once sports are over with and I was able to find myself outside of my athletic abilities” (DI, Men’s Track & Field, AIMS: 29). However, others began shifting their attention to a transition out of sport (potentially earlier than planned). One student-athlete wrote that the experience made them “want to graduate sooner” (Division III, Women’s Basketball, AIMS: 36). While another noted that “COVID-19 made me realize how little sports really mean to me. Not in a bad way, just that I am ready to move on to a different chapter... you have to be aware of when it is time to move on, and COVID helped me with that” (DI, Men’s Basketball, AIMS: 16).

During the pandemic some student-athletes in the sample developed a stronger, maybe renewed commitment to their sport which was recorded in the Likert-scale question but also expressed directly on the free response question. A common theme was for student-athletes to explain how they had used the isolation to improve themselves athletically including these responses, “the pandemic allowed me to focus on training” (Division I, Women’s Track & Field, AIMS: 34) and the pandemic “made me realize that the off-season is truly the most important part of the season and you must want to get better” (Division I, Women’s Volleyball, AIMS: 36). Interestingly, students who responded about a renewed commitment to sport did not necessarily exhibit a high AIMS score. This response was from a Division I Men’s Country student-athlete with an AIMS of 7: “I realized how fortunate I was and lucky to still be able to compete. I began not

taking it for granted.”

Finally, an overarching theme with multiple layers are mental health concerns from a variety of topics including a lack of motivation, “it took away my drive to run and took away my motivation” (DI, Men’s Track & Field, AIMS: 26), and “since the start of COVID, I slowly started losing the love I have for the game” (DIII, Men’s Basketball, AIMS: 46). Additionally, there were feelings of isolation and loss of connection; “most of my friends are my teammates and I realized I didn’t know anyone outside of them” (DI, Softball, AIMS: 39) and “it made me realize how much I depend on [team] interactions for social and mental health benefits” (DI, Softball, AIMS: 45). Finally, there were great worries about personal and family health noted by these student-athletes; “the pandemic, in a way, stressed me out during my sport. I feared getting COVID as I feared being scolded as if it was my fault” (DI, Women’s Soccer, AIMS: 42) and “with family and friends dying around me, the importance of sports pales in comparison.” (DI, Women’s Basketball, AIMS: 34).

Responses to the free response COVID-19 question were often times raw and descriptive and gave further evidence of the vast impact that the pandemic has had on NCAA student-athletes. The personal student-athlete accounts provided context for the quantitative findings of the statistical models. Chiefly, parallels between the themes of acknowledgement of life without sport and the recommitment to sport in the face of adversity and the COVID-19 Likert-scale question regarding the pandemic were clear. The quantitative question resulted in a wide range of responses and the qualitative responses echoed this. While most acknowledged that the pandemic was impactful, some wrote that it pushed them away from sport while others wrote that it pushed them to train

and prepare with greater intensity for a return to competition. Next, the theme of mental health concerns was evident throughout the free responses. Finally, though an overall positive association between the COVID-19 variable and AIMS scores exists, one should be careful not to make assumptions about how the pandemic has affected individual student-athletes as there was a great variety of responses.

Research Question 2

Is there a significant difference in the athletic identity levels (per AIMS score) of student-athletes based on transfer status (transfer or native), current NCAA division, and various demographic variables?

To fully assess the impact of transfer status in the presence of other demographics variables, the GLM-Univariate analysis was expanded to include additional factors. Due to the significant finding in research question 1, the COVID-19 factor was included in the analysis. Only the main effects were examined, and hence the test was run using Type II error. Given the presence of existing significant factors, the corrected model was significant ($F(19, 393) = 8.273, p < .001$), but the main effects now accounted for 28.6% ($R^2 = .286$) of the variance in the AIMS scores.

In addition to the significant variables for transfer status ($F(1, 393) = 10.00, p = .002$) and COVID-19 commitment to sport question ($F(6, 393) = 22.40, p < .001$), one new significant variable was identified: the overall academic experience of the student. This variable, defined by question six of the survey regarding the overall academic experience of the student-athlete, was significant with ($F(3, 393), p = .008$). Due to very small numbers of students who responded that their overall academic experience was at least somewhat negative, the three “negative” response options were combined into a

recoded variable for analysis in research question two and three. Additional independent variables were part of the analysis for research question two including the current division of the respondents, the sport of the respondent classified by gendered NCAA teams and the race and ethnicity of the student-athlete. As shown in the ANOVA, Table 13, none of these variables were found to be significant predictors of AIMS; current division ($p = .533$), gender ($p = .914$), race/ethnicity ($p = .962$).

Table 13

Research Question 2 – ANOVA Table

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Corrected Model	5490.76	19	288.99	8.273	< .001*
Current division	44.03	2	22.02	0.630	.533
Gender by sport	0.407	1	0.41	0.012	.914
Race/Ethnicity	51.14	6	8.52	0.244	.962
Overall academic experience	418.48	3	139.49	3.994	.008*
Transfer status	349.32	1	349.32	10.000	.002*
COVID, commitment to sport	4694.68	6	782.45	22.400	< .001*

*Note: Significant at the $p < .05$ level.

A post hoc analysis was also needed to interpret the significant effects of each of the variables. The results for transfer status and COVID-19 commitment to sport were already provided with Research Question 1, and hence not repeated. The other significant variable “overall academic experience” originally had six possible choices (very positive to very negative); however, as shown on Table 14, small cell counts occurred on the two lowest response options, “Negative” ($N = 1$, $M = 45.0$) and “Very Negative” ($N = 2$, $M = 39.5$, $SD = 4.95$). As stated before, due to these small numbers, the variable was recoded into the following options before analysis: “very positive” ($N = 106$), “positive” ($N = 199$), “somewhat positive” ($N = 89$), “at least somewhat negative” ($N = 19$). Though the

model shows the overall academic experience variable to be a significant predictor of AIMS ($p = .008$), the Tukey pairwise comparison only resulted in one nearly significant pair. “Very positive” and the combined “at least somewhat negative” option produced a significance figure of $p = .052$. This anomaly is likely due to the small sample size for the negative group as Table 14 shows an inverse relationship with a generally increasing AIMS score as the academic experience becomes more negative.

Table 14

Overall Academic Experience Variable

	<i>N</i>	<i>%</i>	<i>AIMS M</i>	<i>SD</i>
Very positive	106	25.7	36.96	7.75
Positive	199	48.2	37.89	6.32
Somewhat positive	89	21.5	37.80	6.94
At least somewhat negative	19	4.6	40.74	5.35
Total	413	100.0	37.77	6.83

Research Question 3

Is there a significant difference in the athletic identity levels (per AIMS score) of transfer student-athletes based on their transfer type (2-4 or 4-4) and various demographic variables?

The final research question focused only on the subset of respondents that identified as transfer student-athletes. Though there are many ways to distinguish between the various transfer scenarios, the difference between the vertical (2-4) versus lateral (4-4) transfer was chosen for analysis because these are common terms in the athletic industry. It is common for coaches, athletics compliance officers and athletic academic advisors to speak about 2-4 or 4-4 transfers as each group has distinct NCAA rules that they must adhere to for eligibility. The analysis also included the following

independent variables: current division, gender (per sport team), race and/or ethnicity, overall academic experience at current institution, and the commitment to sport based on COVID survey question.

For research question three a GLM-Univariate test was also conducted and found that the model was not significant, ($F(18, 48) = 0.770, p = .722, R^2 = .224$). Therefore, there was not a significant difference in athletic identity scores of transfers based on their transfer type, lateral (4-4) versus vertical (2-4) (Table 15). Yet, the various descriptive statistics regarding transfers in relations to their athletic identity scores by independent variable produced meaningful data for researchers and practitioners.

Table 15

Research Question 3 – ANOVA Table

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Corrected Model	696.59	18	38.7	0.770	.722
Current division	42.70	2	21.35	0.425	.656
Gender by sport	94.25	1	94.25	1.876	.177
Race/Ethnicity	90.56	5	18.11	0.361	.873
Overall academic experience	64.57	3	21.52	0.428	.733
Transfer type	27.95	1	24.95	0.556	.459
COVID, commitment to sport	366.67	6	61.11	1.217	.314

*Note: Significant at the $p < .05$ level.

Finally, there were eighteen different transfer scenarios among the 67 respondents. Student-athletes had the ability to pick their exact personal situation whether it was a transfer from a junior college to a Division I institution or a move from a Division II school to a Division III university. Yet, in order to analyze effectively, these situations needed to be grouped. Groupings considered were; a change in division versus no change in a division, transfers going “up” versus going “down” versus no change in

division upon transfer and finally the 2-4 versus 4-4 scenarios. As has been discussed, the lateral versus vertical grouping was selected for research question three but the other groupings are meaningful as well and their descriptive statistics are located in Table 16.

Table 16

AIMS Scores per Transfer Types

Variable	<i>n</i>	%	AIMS <i>M</i>	<i>SD</i>
Transfer Types				
2-4 Transfers	20	29.9	39.50	6.18
4-4 Transfers	47	70.1	39.89	7.06
Transfer Direction				
Up	27	40.3	38.33	6.55
No Change	32	47.8	40.41	7.20
Down	8	11.9	42.13	4.68
Transfer Status by Change				
Change	35	52.2	39.20	6.38
No Change	32	47.8	40.41	7.20
Total	67	100.0	39.78	6.86

Summary

Chapter four included the main findings of this research study as well as descriptive statistics about the sample. Research question one focused on the impact of the COVID-19 pandemic on a student-athlete's commitment to sport in relation to their athletic identity level and their transfer status. Both the student's transfer status (native or transfer) ($p = .004$) as well as their personal reflection regarding whether the pandemic influenced their sport commitment ($p = < .001$) were found to be significant predictors of AIMS scores. Also, it was found that when the commitment to sport level was strengthened by the pandemic it had a positive relationship with the individual's AIMS score. Additionally, an open-ended survey question about the influence of the pandemic

on the student-athlete produced real-life, raw responses to how the pandemic has impacted our student-athletes and provided context surrounding the complex issue.

Research question two expanded upon the first question and was used to assess if a difference existed between the AIMS scores of native students versus transfer students and included a number of independent variables. Transfer status and commitment to sport during the pandemic were again significant. Additionally, the student's overall academic experience was found to be significant as well ($p = .03$).

Research question three focused only on the transfers in the sample and compared the 2-4 transfers versus the 4-4 transfers in relation to AIMS scores. The findings concluded that there was no significant difference in the athletic identity levels of 2-4 transfers as compared to 4-4 transfers.

Chapter five will include an overview of the study, a discussion of the findings in comparison to the literature, implications of the study and recommendations for practitioners and for future research.

CHAPTER 5: DISCUSSION

Overview of the Study

The initial purpose of this study was to investigate whether significant differences of athletic identity levels were evident in native versus transfer student-athletes. Yet, as data collection was planned to be conducted in spring 2021, it became apparent that the study should also collect and analyze COVID-19 related variables to assess the pandemic's impact on athletic identity. Therefore, the study added the additional goal of seeking to establish if there was a relationship between the influence of the global pandemic on NCAA student-athlete's commitment to their sport and ultimately their athletic identity.

The data collection period for the present study occurred roughly two years after the Transfer Portal began, one year after the pandemic reached the United States, just months before Name, Image and Likeness started and transfer legislation was relaxed by the NCAA. This timeline, outlined in Appendix A, is imperative to remember when interpreting the results of this study.

The sample included student-athletes from the three NCAA divisions and from a variety of institutions and transfer situations. The results of this study will inform personnel who work with student-athletes of the athletic identity differences between transfers and native students as well as attempt to assess the impact of COVID-19 on student-athletes.

Research Questions

The following questions guided the study.

RQ1: Is there a relationship between the impact of COVID-19 on commitment to sport

and athletic identity? If so, is it moderated by transfer status?

RQ2: Is there a significant difference in the athletic identity levels (per AIMS score) of student-athletes based on transfer status (transfer or native), current NCAA division, and various demographic variables?

RQ3: Is there a significant difference in the athletic identity levels (per AIMS score) of transfer student-athletes based on their transfer type (2-4 or 4-4) and various demographic variables?

Summary of the Findings

As stated in Chapter 4, there are multiple findings that are statistically significant from research questions one and two specifically. First, a student's transfer status was a significant predictor of their athletic identity as transfer student-athletes had a higher AIMS scores when compared to native students. Also, the student's response to the COVID-19 pandemic was associated with their AIMS scores. For those who agreed that their commitment to sport was strengthened during the pandemic, their AIMS scores were higher. Conversely, for those who responded that their commitment to sport was not strengthened during the pandemic their AIMS scores were, on average, lower.

Additionally, the self-assessed overall academic experience of the student-athletes was found to be a significant but weaker predictor of AIMS. The sample was overwhelming positive in their response about their academic experiences and those with a positive perspective had, on average, a lower AIMS score as compared to the few respondents who noted that their collegiate academic experience was negative. Finally, research question three which focused on potential AIMS differences between 2-4 versus 4-4 transfer student-athletes did result in any significant findings.

Discussion

Each of the research questions included the common dependent variable of AIMS scores. Also, a variable regarding the commitment to sport during the pandemic was included in all research questions. Transfer status was a common independent variable in question one and two. The following discussion is organized by variables from one or all of the guiding research questions.

First, the student-athletes' self-assessed commitment to sport in the wake of the pandemic was a critical aspect of this study. A majority of student-athletes in the study agreed at some level that the pandemic strengthened their commitment to sport and a positive association was evident whereas a strengthening of this commitment was accompanied by higher athletic identity scores. A recent study found that identity foreclosure during the pandemic was problematic for some athletes (Knowles et al., 2021) and one of the negative outcomes of high athletic identity is a hyper-focus on the athlete role at the exclusion of other roles (Beamon, 2012; Brewer & Petitpas, 2017). The present study did not include an independent variable that directly addressed identity foreclosure yet it is possible to make the connection between a strengthening of the commitment to sport and identity foreclosure around the role of athlete. Therefore, these student-athletes likely maintained or potentially increased their athlete role during the pandemic.

Next, various mental health concerns played a role in how student-athletes perceived and managed the pandemic including feelings of uncertainty and depression (Pillay et al., 2020) as well as stress, helplessness, and a decrease in motivation in their sport (Bullard, 2020; NCAA, 2021b). Additionally, those with higher athletic identities

often have strong social networks within their team (Cutler, 1994; Horton & Mack, 2000; Lavallee et al., 1997) and the isolation during the pandemic may have disproportionately impacted student-athletes who are in constant contact with their teammates and coaches. Finally, it has been found that athletic identity increases as sport participation levels increase (Good et al., 1993; Lamont-Mills & Christensen, 2006; Rasquinha & Cardinal, 2017). Therefore, the converse may be true and a drop in athletic identity levels may occur due to the closing of practice facilities and the cancellations of seasons. The qualitative responses in the survey echoed the literature. Some student-athletes felt isolated or lost motivation while some were able to find and develop roles and identities outside of sport. Additionally, per the responses, it can be seen that while some increased their commitment to sport and training, others intentionally distanced themselves and mentally began their transition out of sport.

Demographic variables including the current NCAA division of the student-athlete, their gender (per the team they play on), their race and/or ethnicity and their academic experiences were part of research questions two and three. But, it is important to note that all previous literature noted was conducted prior to the COVID-19 pandemic.

Potential differences in athletic identity levels based on NCAA division has been a focus of scholarly research. The present study did not find a significant difference in athletic identity between student-athletes based on their current NCAA division. This is in concert with some studies such as Beron and Piquero (2016) who found no difference in athletic identity levels of student-athletes across all three divisions and Sturm et al., (2011) who also did not find differences in athletic identity levels when comparing Division I and Division III student-athletes. In contrast, Griffith and Johnson (2002)

found that Division I track and field student-athletes in their sample exhibited higher levels of athletic identity than the Division III track and field student-athletes in their study. Also, Mathews et al., (2021) found the same to be true when comparing athletic identity levels of Division I versus Division III football student-athletes.

Similar to the concept of potential divisional differences is the idea that transfers might have a different athletic identity level than native students. While there were no previously published scholarly articles in which to compare the present study's results to, a key finding of the present study is that transfers, on average, had higher AIMS scores than student-athletes who had not transferred when including the COVID-19 commitment to sport variable in the statistical model. Yet, the present study did not find a significant difference in AIMS scores between the two main transfer types (2-4 versus 4-4). The transfer population was relatively small in the sample which could have impacted the results.

The present study found no significant difference in athletic identity levels based on gender. Previous literature has provided mixed results with some studies showing men with higher AIMS and some showing women with higher scores. Sturm et al., (2011) found that gender was a significant predictor of athletic identity levels with females having lower levels when compared to males in their study of Division I and Division III student-athletes. Melendez (2009-2010) concurred and found that males reported higher athletic identity scores than females. Conversely, Tyrance et al., (2013) found that females had a higher athletic identity level than males in their study of 538 Division I student-athletes from four high-major FBS institutions.

Next, an independent variable in research question two focused on the race or

ethnicity of the student-athlete. The present study found no difference in the athletic identity of student-athletes based on their race or ethnicity. These findings agreed with scholars such as Tyrance et al., (2013) who did not find that any particular race was a significant predictor of athletic identity levels for Division I student-athletes. Yet, Beamon (2012) found that African-American male former student-athletes exhibited high athletic identity levels and high rates of identity foreclosure. While Melendez (2009-2010) found in their study of 101 Division I athletes that Caucasians had higher athletic identity levels than African-Americans. The sample for the present study was overwhelmingly White so it is possible that a more diverse sample could have produced different results.

The variable of “overall academic experience” which was rated on a “very positive” to “very negative” Likert-scale question in the study’s survey was found to be a significant predictor of athletic identity in the model for research question two. Unlike a variable like NCAA division, for example, this factor was more difficult to compare to previous studies which included different academically-related variables. A frequently studied aspect of athletic identity is its relationship with the student identity or role and many found an inverse relationship between athletic identity and the student role (Adler & Adler, 1991; Beron & Piquero, 2016; Hale & Waalkes, 1994; Melendez, 2009-2010; Miller & Kerr, 2003; Sturm et al., 2011). Additionally, athletic identity has shown to influence GPAs and academic major selections (Beron & Piquero, 2016; Foster & Huml, 2017). Due to very small sample sizes a proper pairwise comparison could not be run but the AIMS mean in Table 6 do seem to suggest that those who had negative academic experiences at their institution(s) reported higher athletic identities.

Implications

The implications of this study and its findings are many and likely extend outside of the intercollegiate athletics arena. They include the notion that student-athletes who transfer are likely to have a high athletic identity; identity is influenced by conditions and the pandemic shifted the personal paradigm for some; and finally, the pandemic was/is a life-altering event that impacted the mental health of college students immensely.

It is important to recognize that transfers (student-athletes and those in the general population) are not homogenous. Yet, as a group, transfer student-athletes in the present study did exhibit a higher athletic identity score than their non-transfer fellow student-athletes. Additionally, it has been documented that student-athletes' reasoning for transferring is largely due athletic reasons (Richards et al., 2016). Also, the transfer trend is not slowing down and has become even easier with the Transfer Portal. Finally, transfer student-athletes are more academically at-risk than native students (Brecht & Burnett, 2019). Therefore, the increased academic risk of transferring coupled with high athletic identity scores results in many transfer student-athletes struggling towards or unable to achieve the ultimate goal of graduation.

Next, identity is influenced by people (Chickering, 1969; Erickson, 1959; Hogg et al., 1995; Stryker, 1968) and conditions. Conditions could include NCAA division (Griffith & Johnson, 2002; Mathews et al., 2021; Sturm et al., 2011), athletic participation (Anderson et al., 2009; Good et al., 1993; Lamont-Mills & Christensen, 2006; Rasquinha & Cardinal, 2017), and retirement (Alfermann et al., 2004; Baillie & Danish, 1992; Cutler, 1994; Lally, 2007). The results of the present study confirmed that athletic identity was/is influenced by the global pandemic, an ever-present condition in

intercollegiate athletics since March 2020. A survey question asked if, during the pandemic, the student-athlete's commitment to sport was strengthened and this proved to be a crucial variable in the study. The positive association between this variable and AIMS scores was evident. Simply, those who strongly agreed that the pandemic strengthened their commitment exhibited higher scores and those who strongly disagreed with the question had lower scores and this held true for every answer choice. The condition of the pandemic shaped personal identities for many student-athletes.

Lastly, the pandemic was/is a life-altering event that impacted the mental health of student-athletes in this study. Though there is evidence of unique and varied experiences and responses to the COVID-19 pandemic, it is clear that it was, and will continue to be, a milestone event for these students. In addition to the influence the pandemic had on athletic identity scores, it also caused mental distress for many. As evidenced by the responses to the open-ended question in the survey, student-athletes suffered from isolation, lack of motivation, lack of purpose or direction. They wrote of worries, anxieties, and fears for themselves, their friends, and their families. Clearly, the pandemic gave an opportunity for many to self-reflect and reconsider their athletic and academic goals and make monumental decisions about their next steps which will impact their athletic, academic and career timelines.

Recommendations for Practice

Seasoned practitioners in collegiate athletics from administrators to coaches to academic advisors are likely not surprised that transfer student-athletes had higher athletic identities than native student-athletes in this study. The most common reason for a student-athlete to transfer is for athletic reasons, so high athletic identities can be

assumed. Many universities have transfer-specific orientations and transfer-specific transition courses offered which are helpful academically. Also, these student-athletes are evaluated for admissibility and eligibility and assisted in selecting an academic major by academic advisors and/or compliance staff. But, this may not be enough to assist transfer student-athletes. The concept of athletic identity and the positive and negative outcomes should be talked about with student-athletes, athletic personnel and university stakeholders. These discussions should become a part of the departmental culture. Negative outcomes of high athletic identity are numerous including; influencing academic major selection (Foster & Huml, 2017), impacting the likelihood of using academic resources (Antshel et al., 2016), a higher propensity of delayed career development (Houle & Kluck, 2015; Linnemeyer & Brown, 2010; Murphy et al., 1996), and adversely impacting the transition out of sport upon injury, graduation, or retirement (Webb et al., 1998). Non-athletic university personnel including major advisors, faculty, counselors and career center professionals should become well versed in the various outcomes of high athletic identities so they can advise these students more effectively and gain a greater awareness of their unique make up. A lingering concern is that student athletes' can be so focused on their athletic identities that typical college experiences, such as career exploration, may be an afterthought. Additionally, athletic identity should become a standard discussion topic with all student-athletes both in a classroom or workshop setting as well as in one-on-one discussions with athletic personnel. In fact, the AIMS survey is a very quick and easy way to begin the conversation with student-athletes and should be utilized

Furthermore, student-athletes should be encouraged and be given the time and space to discover, embrace and expand their multiple roles or identities. Those who are skilled in the arts or passionate about social activism or excited about chemistry research, for example, should be celebrated for their well-roundedness. In recent years, many student-athletes have found their voices outside of the parameters of athletics in two specific ways: many are fighting injustice on their campuses and nationally and many are becoming entrepreneurs with the advent of Name, Image and Likeness (Murphy, 2021). Campus personnel must continue to encourage the development of the total person not just the identities of “student” and “athlete” and this is even more critical with transfer student-athletes. The transition out of sport is also a pivotal time. Baillie and Danish (1992) concluded that preretirement counseling must be a component of effective interventions for transitioning athletes, giving them an opportunity to face the realization of life without sport. Therefore, athletic departments must intentionally work with campus partners including counseling centers and career centers to assist in the transition out of sport for their student-athletes.

In response to the statistical findings as well as the qualitative responses regarding the pandemic, it is imperative that the short-term and long-term impacts of COVID on student-athletes remains top of mind. The pandemic influenced the way student-athletes at every division considered (and reconsidered) the place of sport in their lives. For some, this could have been a short-term response. Others may have been changed forever in how they view sport and consequently their academics, school selection, life goals, etc. It was important to learn that student-athletes handled the pandemic both positively and

negatively and that a variety of factors likely dictated those responses. Finally, one would be wise not to generalize how the pandemic might have affected all student-athletes.

There are multiple recommendations for student-athletes directly. First, it is important to realize that there was great diversity in the responses to the pandemic and everyone's experience and persistence through the pandemic is unique and valid. Student-athletes should not assume that their response and attitudes toward the pandemic, in light of their sport, academics or mental health, was correct or incorrect. Additionally, student-athletes should be aware that those who had a greater network of connections due to a diverse friend group and non-athletic activities seemed to have been able to handle the disruption to their sport in a healthier way. Lastly, student-athletes should know that displaying a high athletic identity level does not exclude them from having high identity levels in other areas such as in academics or the arts and that a wide diversity of AIMS scores were realized in each division, race/ethnicity, gender and academic experience group in the study.

Recommendations for Future Research

There are many additional opportunities for research in this area. First, more studies must be conducted on the transfer student-athlete population. Now that there are few restrictions on student-athletes, transferring will only increase and it is known that this group is more academically at risk than those who do not transfer. Some ideas include: a similar study with a larger, more diverse sample to fully understand potential athletic identity differences by sport and division; further research on the potential differences between 2-4 and 4-4 transfers with a larger sample, and a study directed at those student-athletes who enter the Transfer Portal but do not find a new institution to

attend. Additionally, this study was unable to account for possible institutional effects and there could have been some similarities found in a number of variables including the athletic identity levels and the COVID-19 questions which could be associated with specific institutions.

Additionally, the COVID-19 related possibilities are endless for future research. One idea is a longitudinal study that tracks the athletic identity changes of those who experienced years of COVID-related sport disruptions. Also, the open-ended responses to the present study were raw and impactful; therefore, a qualitative study that fully captures the voices of student-athletes and focuses on how they evolved as a result of the pandemic would be meaningful. Specific attention to areas of mental health, influence of networks, and opportunities for career development and exploration in response to COVID are likely to be fruitful. Finally, another way to assess the intersection of COVID and transfers would be to study student-athletes who have chosen or will choose to use their additional “COVID year” of eligibility as a graduate transfer.

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Appendix A

Timeline of Study

October 2018	NCAA Transfer Portal begins providing a national database of all student-athletes who wish to transfer and continue participating in their sport. This allows coaches the opportunity to see who is available and willing to transfer (Johnson, 2019).
March 12, 2020	NCAA cancels winter & spring championships due to COVID (NCAA, 2020e).
Fall 2020	NCAA student-athlete well-being survey: Fall 2020 of 25,000 student-athletes from all divisions found top three mental health concerns were “academic worries”, “COVID-19 health concerns” and “lack of access to sport” (NCAA, 2021b). Additionally, 28% of respondents were tested weekly, 37% had been in isolation/quarantine due to COVID and 25% agreed or strongly agreed that they had a lack of motivation to train during fall 2020 due to the pandemic (NCAA, 2021b).
March 28, 2021	Present study receives IRB approval.
April 2021-May 2021	Present study data collection period.
April 28, 2021	New NCAA transfer legislation (NCAA proposal 2020-11) approved eliminating the requirement for transfers in all sports (including for the first time football and basketball student-athletes) to sit out of competition during their first year at their new institution (Dellenger, 2021).
July 1, 2021	Name, Image and Likeness (NIL) begins allowing student-athletes to use their name, image or likeness to endorse commercial products for payment (Murphy, 2021).
Fall 2021	The one-time transfer exception becomes universal allowing student-athletes in all sports to transfer once from a four-year institution to a four-year institution and participate immediately assuming they meet the academic thresholds.

Appendix B

Survey Instrument

1. Select main sport (drop down menu of NCAA sport offerings):
2. Currently, which best describes your college status?
 - a. 1st year/Freshman
 - b. Sophomore
 - c. Junior
 - d. 4th year Senior
 - e. 5th year Senior
 - f. Graduate Student/2nd degree seeker
3. Select race/ethnicity:
 - a. African-American
 - b. Asian or Pacific Islander
 - c. Hispanic or Latinx
 - d. Native American or American Indian
 - e. White
 - f. Two or more
 - g. Non-U.S./International
4. How do you feel about your overall college *academic* experience up to this point?
 - a. Very positive
 - b. Positive
 - c. Somewhat positive
 - d. Somewhat negative
 - e. Negative
 - f. Very negative
5. Did you transfer to your current school?
 - a. If Yes, continue to question 6
 - b. If No, continue to question 8
6. Select the most accurate representation of your *most recent* transfer experience based on athletics divisions/levels?
 - a. Division I to Division I
 - b. Division I to Division II
 - c. Division I to Division III
 - d. Division II to Division I
 - e. Division II to Division II
 - f. Division II to Division III
 - g. Division III to Division I
 - h. Division III to Division II
 - i. Division III to Division III

- j. NAIA to Division I
- k. NAIA to Division II
- l. NAIA to Division III
- m. Junior College/Community College to Division I
- n. Junior College/Community College to Division II
- o. Junior College/Community College to Division III
- p. Foreign institution to Division I
- q. Foreign institution to Division II
- r. Foreign institution to Division III

7. Select the main reason for transferring from your previous school to your current school:
- a. Academic reasons
 - b. Athletic reasons
 - c. Medical (physical and/or mental health) reasons
 - d. Financial reasons
 - e. Personal and/or family reasons

8. AIMS instrument questions:

Brewer and Cornelius (2001) AIMS Seven Question Survey

- A. I consider myself an athlete.

Strongly Disagree		Strongly Agree
1	2	3
4	5	6
		7

- B. I have many goals related to sport.

Strongly Disagree		Strongly Agree
1	2	3
4	5	6
		7

- C. Most of my friends are athletes.

Strongly Disagree		Strongly Agree
1	2	3
4	5	6
		7

- D. Sport is the most important part of my life.

Strongly Disagree		Strongly Agree
1	2	3
4	5	6
		7

E. I spend more time thinking about sport than anything else.

Strongly Disagree

Strongly Agree

1 2 3 4 5 6 7

F. I feel bad about myself when I do poorly in sport.

Strongly Disagree

Strongly Agree

1 2 3 4 5 6 7

G. I would be very depressed if I were injured and could not compete in sport.

Strongly Disagree

Strongly Agree

1 2 3 4 5 6 7

9. As a result of the COVID-19 pandemic, my commitment to being an athlete was strengthened.

Strongly Disagree

Strongly Agree

1 2 3 4 5 6 7

10. Describe in your own words how the COVID-19-19 pandemic influenced the way you view the importance of sport in your life.

Appendix C

Pairwise Comparison – Research Questions 1 and 2 – COVID-19 Question

7 – Strongly agree								
6 – Agree								
5 – Somewhat agree							*	*
4 – Neutral							*	*
3 – Somewhat disagree						*	*	*
2 – Disagree		*	*	*	*	*	*	*
1 – Strongly disagree		*	*	*	*	*	*	*
	1	2	3	4	5	6	7	
	Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree	

*Note: Significant at the $p < .05$ level.