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Does Participation in College Athletics Prepare Student-Athletes for Careers and Life After College Sports?: A Review of the Literature

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Does participation in college athletics prepare student-Athletes for careers and life after college sports?:

A synthesis of the research literature

A Synthesis Project

Presented to the

Department of Kinesiology, Sports Studies, and Physical Education

The College at Brockport

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In Partial Fulfillment

Of the requirements of the Degree

Masters of Science in Education

Concentration in Athletic Administration

By

Morgan Stout

May 10, 2018

THE COLLEGE AT BROCKPORT
STATE UNIVERSITY OF NEW YORK
BROCKPORT, NY

Department of Kinesiology, Sport Studies and Physical Education

Does College Athletics Prepare Student-Athletes for Careers and Life After College Sports?:

A Synthesis of the Research Literature

Read and Approved by: _____ *Susan C. Petersen* _____

Date: _____ May 10, 2018 _____

Accepted by the Department of Kinesiology, Sport Studies, and Physical Education, the College at Brockport, State University of New York, in partial fulfillment of the requirements for the degree of Master of Science (Physical Education).

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Abstract

The transition from student-athlete to non-student-athlete is a daunting time for many student-athletes that can bring a flood of both positive and negative emotions. Currently there are few organized programs that prepare student-athletes for this challenging life transition. This synthesis reviewed literature regarding the transition process that student-athletes experience when leaving collegiate athletics.

A total of ten articles were chosen to be included in the critical mass for this synthesis and information was organized by completing 12-step outlines for each article. The following six research questions were intended to be answered: (a) what do student-athletes experience when leaving the world of college athletics?, (b) is there a difference between males and females when transitioning out of college sports?, (c) what are the experiences of DI and DIII athletes like?, (d) what is the impact of injury on the transition from student-athlete to non-student?, (e) what are some of the strengths and weaknesses student-athletes bring to careers and life after college sports?, (f) what can colleges do to prepare student-athletes for life after college athletics?

Results indicated the transition experience is a process that requires both academic and career planning. Between Division I and Division III, there are few differences in the transition experiences of student-athletes. Gender played a significant role in the transition and males needed more targeted intervention programs than females. The athletes who suffered career ending injuries had a more difficult transition experience, especially when they had to make the decision to leave sport themselves. It is important for institutions to provide career planning early and often for student-athletes in order to prepare them for life after college sports.

Chapter 1

Introduction

Each year in May, hundreds of thousands of National Collegiate Athletic Association (NCAA) Division I, II, and III student-athletes walk across the stage at their commencement ceremonies marking the end of their time as collegiate student-athletes (Partridge, 2015). These high-level athletes comprise an average 6.16% of high school males and 8.13% of females from twenty-seven sports who are given the opportunity to compete beyond their high school years (NCAA, 2017). For many student-athletes, the experience is sad, overwhelming, frustrating and exciting all at the same time because according to the NCAA, fewer than 10% of these collegiate student-athletes will compete at the professional level in their given sport (Partridge, 2015). The 90% of student-athletes, whose athletic careers end when they walk across the commencement stage will be forced to navigate a daunting transition out of their sport which can be stressful; some may struggle with anxiety, low levels of confidence, or even depression (Partridge, 2015).

For some student-athletes, their career ends because they have fulfilled their eligibility but others experience devastating career ending injuries that prematurely end their athletic career. Tyler, a 23 year old Division I hockey player, suffered a life-threatening injury and unlike others, his injury was so severe that he approached the situation in a more positive manner because he was just happy to be alive (Stoltenburg, Kamphoff, & Lindstrom Bremer, 2011). Not all athletes who are forced into this transition period have such a positive outlook on their situation. Prim, a former tennis player, explained that no one prepared her to say good bye to the sport she had loved for the greater part of her life (Siripipat, 2016). Prim was a top 10 nationally ranked U.S. National Team member and Duke University tennis player who remembers the struggles she had trying to balance her responsibilities as both student and athlete during college

(Siripipat, 2016). The emotional and mental distress that Prim endured when she graduated was a “shock to [her] system” (Siripipat, 2016). The hundreds of thousands of student-athletes who do not continue on into professional sports like Prim are suddenly left asking themselves ‘who am I?’ and ‘what next?’ (Siripipat, 2016). Prim remembers that the most painful part of her transition period was saying goodbye to tennis itself (Siripipat, 2016).

With guidance and proper preparation by college athletic departments, student-athletes can be better prepared to endure what could be the most challenging time of their life. Unfortunately few programs are in place to help prepare student-athletes for this transition period in their lives. The NCAA Life Skills program is one program which works with the NCAA national office, the 1,200 member institutions, the affiliate organizations, and conference offices to prepare student-athletes for life after graduation (NCAA, 2016). The NCAA Life Skills program was molded from Dr. Homer Rice’s Total Person Project which aims to educate student-athletes about balancing academic achievement, athletic success and personal wellbeing (NCAA, 2016). The NCAA has made an effort to provide a program for student-athletes but this program only benefit institutions that participate, leaving the majority of student-athletes behind. Although some schools have developed programs, there is no overarching program to benefit and prepare each and every NCAA DI, DII and DIII student-athlete.

Purpose:

The purpose of this study is to explore the transition period that National Collegiate Athletic Association (NCAA) student-athletes undergo after retirement from sport in an effort to better help them with this challenging life transition.

Research Questions:

1. What do student-athletes experience when leaving the world of college athletics?

2. Is there a difference between males and females when transitioning out of college sports?
3. What are the experiences of DI and DIII athletes like?
4. What is the impact of injury on the transition from student athlete to non-athlete?
5. What are some of the strengths and weaknesses student-athletes bring to careers and life after college sports?
6. What can colleges do to prepare student-athletes for life after college athletics?

Operational Definitions:

Normative Transition – An anticipated transition out of sport which can include life events such as graduation and exhausting eligibility (Stoltenburg, Kamphoff, & Lindstrom Bremer, 2011).

Non-Normative Transition – Non-normative transitions, on the other hand, occur unexpectedly such as when an athlete suffers a career ending injury (Stoltenburg, Kamphoff, & Lindstrom Bremer, 2011).

Assumptions:

1. It was assumed that all instruments and scales used within the studies were reliable and valid measures.
2. It was assumed that all participants in the study answered all scales and questionnaires truthfully and followed the necessary protocols honestly.

Limitations:

1. Some of the studies used had a very small sample size.
2. Some studies limited their participants to a specific Division within the NCAA, school or region of the United States or Canada.
3. Some studies only focused on student-athletes from a specific sport.

Delimitations:

1. All of the articles were published after the year 2000 (2000-2018).
2. All articles were data-based, peer reviewed and published in an academic journal.
3. All articles had to focus on the transition period that student-athletes undergo after graduating, exhausting their NCAA or NCAA equivalent eligibility or enduring a career ending injury.
4. All studies examined NCAA Division I, II, or III student-athletes or Canadian collegiate student-athletes. Canadian collegiate athletics is comparable to NCAA Division II.

Chapter 2

Methods

The purpose of this chapter is to present the methods used to synthesize research regarding the transition student-athletes experience when leaving collegiate sport. This chapter will address the methods and procedures used for data collection and data analysis.

Data Collection

All of the studies used for this synthesis were found via a computer database that provided peer-reviewed and scholarly articles. EBSCOHOST search engine was used and Academic Search Complete, SPORTDiscus, Education Complete, Physical Education Index, PsychINFO were used in order to find the articles.

The SPORTDiscus database search with the keywords “*Athlete*” and “*retirement*” and “*college*” yielded 93 articles. The search was limited to academic journals, which narrowed the search to a total of 35 articles. Out of the 35 articles one article was saved to use for the critical mass. The other articles in the search results were either published earlier than the year 2000, or the information they provided did not pertain to the research questions being asked.

The next search used the same database and the keywords “*student-athlete*” and “*career transition*”. The search yielded a total of 18 articles. Two new articles were saved and used in the critical mass. All other articles were either not published between 2000 and 2018 or did not pertain to the research questions being asked.

The same database was used for the next search with the keywords “*Colleg* athletes*” and “*athletic identity*”. The search was then limited to articles published between 2000 and 2018 and academic journals only. The search provided 107 articles and one was saved to be used in the critical mass.

A fourth search using the database SportDiscus and the keywords “*collegiate athlete*” and “*retirement*”. This search produced 19 articles; one article was saved to be used for the critical mass. All other articles did not contribute to answering the research questions.

The next search used the database, Education Source and used the keywords “*student athletes*” and “*career transition*”. The result of this search was 20 articles. The search was narrowed to academic journals only which elicited 15 articles. One article was saved for the critical mass. The remaining articles were not relevant for the critical mass.

Another search was conducted using the database, PsychInfo, which used the keywords “*athletic identity*” and “*college*”. The search was narrowed to articles published between 2012 and 2018 which produced 139 articles. One article was saved to be used in the critical mass. All other articles were not relevant to the research questions asked.

The next search used the same database and the keywords “*DIII student-athletes*” which produced three articles. One article was saved to be used for the critical mass and the other two articles were not relevant to the research questions.

A backwards search in Leonard and Schimmel’s article Theory of Working Adjustment and Student-Athletes’ Transition out of Sport produced one new article to be used for the critical mass.

In order to be included in the critical mass, the articles must have been data-based research studies that were published in peer-reviewed academic journals. In addition, the articles must have explored one of the following topics: (a) transition experiences of student-athletes, (b) the difference between female and male transitions experiences, (c) transition experiences of Division I and Division III student-athletes, (d) qualities and skills that student-athletes bring to

their careers after graduation, or (e) what colleges can do to prepare student-athletes for their life after college athletics.

A total of ten articles met the requirements and contributed to the critical mass that was used for this synthesis. The articles used in the critical mass were found in the following academic journals: *Journal of Vocational Education and Training*, *Psychology of Sport and Exercise*, *Sport Education and Society*, *Journal of Clinical Sport Psychology*, *Athletic Insight Journal*, *Journal of Sport Behavior*, *Journal of Career Development*, and *the Journal of Issues in Intercollegiate Athletics*.

Data Analysis

A two-step process was used in order to pull information from the articles used in this study. The first step was to take notes of the articles in order to broadly outline a 12-step analysis for each article. Then a data coding table was compiled using the following categories: (a) APA citation, (b) purpose, (c) methods, participants, procedure, (d) data analysis, (e) findings, and (f) recommendations and limitations. This table was used in order pull common themes and trends from the articles in the critical mass and is included in Appendix A.

The critical mass of articles for this synthesis consisted of five quantitative studies. The quantitative articles used a wide range of career and athletic identity scales which used Likert scales for data collection. The following scales were used: Life After Sports Scale (Lass), Athletic Identity Measurement Scale (AIMS), Student Occupational Engagement Scale (OES), Career Decision Self-Efficacy Scale (CDSES), Career Maturity Inventory-Revised (CMI-R), Objective Measure of Ego Identity Status, Commitment to Career Choice Scale (CCSC) and Career Future Inventory (CFI). SPSS statistical analysis, mean and standard deviation were used in order to find significant differences in the data.

A total of five articles in the critical mass used qualitative methods. All of the qualitative studies used structured or semi-structured interviews, visual elicitation or the Delphi method. The interview responses were grouped into categories and common themes were derived.

All of the articles focused on NCAA student-athletes in the United States, collegiate student-athletes in Canada, and participants included coaches, experts in higher education and student-athletes from Division I or Division III institutions. The sample size of the subjects represented included 1,187 student-athletes, 121 fine arts students, 104 general students, 14 coaches, and 11 experts of higher education, sport and exercise psychology or counseling.

Chapter 3

Review of Literature

The purpose of this chapter is to review the literature that was used as the basis for this synthesis. Once a full literature search was completed, a total of ten articles that met the criteria were considered for the critical mass. The results will be reported across four themes: (a) overall transition experience, (b) athletic identity, (c) impact of injury, and (d) career maturity.

Overall Transition Experience

The first section of the articles in this chapter focused on the overall transition experience of student-athletes. There were three articles that fit this category.

The first article in this section by Harrison and Lawrence (2004). The purpose of the study was to examine the perceptions that student-athletes have concerning the athletic career transition process. Participants included 79 male and 64 female student-athletes with an average age of 20 who attended an NCAA Division II institution in South Carolina. The student-athletes competed in twelve sports including: men's/women's tennis, men's/women's basketball, men's/women's soccer, men's/women's cross country, men's golf, women's volleyball, baseball and softball.

Harrison and Lawrence used grounded and visual elicitation to conduct their study with the goal of understanding an individual's experiences at the deepest level possible. The researchers also utilized coding in order identify themes.

Participants were asked to complete the Life After Sports Scale (LASS) which took approximately 30 minutes to complete. During the qualitative section of the LASS participants were asked to read a student-athlete profile and reflect on how it related to their own lives as student-athletes.

Each of the written responses to the student-athlete profile, which was presented to the participants, were transcribed in order to be analyzed. Then the investigative team consisting of the two main researchers and two trained researchers used line-by-line coding, followed by open coding to determine the common themes that existed among participants' responses. Later, the investigative team discussed the major themes that they had identified.

Results showed three major themes within the data: career path well planned, balancing academics and athletics, and positive role model. Participants discussed the importance of planning for a career that you are going to enjoy. The student-athletes realized that in order to have a fulfilling career they did not need to leave sport completely but that they could find a career around sport. The student-athletes agreed that in order to be a true student-athlete there must be a balance between academics and athletics. The participants, after reading the student-athlete profile, acknowledged the importance of a positive role model who has experienced similar events in their life.

The second article in this section is by Bjornsen and Dinkel (2017). The purpose of this study was to investigate the influence coaches have during an athlete's transition out of collegiate athletics. Bjornsen and Dinkel also explored the unique impact coaches have on existing academic and career support programming that exists to better prepare student-athletes during the transition process.

A total of fourteen Division I NCAA coaches, twelve men and two women, participated in this study. Participants must have met the following criteria: must have been coaching long enough to see student-athletes transition out of their program and were the primary contact for alumni communication. Bjornsen and Dinkel contacted the Assistant Director for Academic Success (AADAS) to explain the goal of the study and to obtain help recruiting participants.

Participants coached the following teams: baseball, basketball, golf, soccer, men's ice hockey, swimming and diving, tennis, women's track and field, and women's volleyball. The participants were contacted via e-mail and those who were interested scheduled interviews with the researchers.

The researchers used a phenomenological methodology and conducted semi-structured interviews that were audio recorded and lasted no longer than one hour. The interviews were transcribed by graduate assistants and analyzed by the authors using horizontalization and identifying similar themes. Then related statements from participants were grouped together to identify larger existing themes. The researchers independently coded their transcripts and then used Schlossberg's Transition Theory (STT) for the deductive process in organizing the themes.

Bjornsen and Dinkel's findings confirmed that the transition that student-athletes experience from sport into their non-sport careers is a complex process. Both interpersonal and institutional support over the past few years has increased across universities. The majority of participants highlighted the importance of dedicated academic support staff before and during the transition process. Programs offered by the NCAA such as the Life Skills program was regarded by the coaches as beneficial in creating a well-rounded and well-adjusted student-athlete. The program works to develop academic and athletic success in combination with personal wellbeing.

The coaches concurred that the needs of athletes should be considered across their four years of college. For athletes, declaring a major in the early years of college can prematurely foreclose on their career exploration opportunities. Foreclosing early can narrow their focus to a single career path without allowing the athletes to gain hands on experience to determine whether or not they will truly enjoy that career. Participating in collegiate athletics is a

demanding and time consuming endeavor for students. Therefore student-athletes tend to lack co-curricular involvement which can pose a barrier for athletes to gather "information and experiences" that can shape their careers post-graduation (Bjornsen & Dinkel, 2017).

It was recommended that athletic departments create mentoring programs in which underclassmen are paired with upperclassmen sharing the same academic majors as well as pair upperclassmen to newly graduated alumni. Pairing students with the same majors early on can give them insight regarding what is to be expected in their majors. Connecting student-athletes with recent alumni who can attest to their post-graduation transition experience can help current student athletes navigate this difficult process (Bjornsen & Dinkel, 2017).

The coaches believed that skills and strengths that student-athletes obtain through sport such as leadership, teamwork and time management will transfer to the real world. Student-athletes will enter a competitive job market forced to compete with general students who may have lacked the demands of sports and were therefore able to capitalize on career development opportunities.

The last article in this section was by Leonard and Schimmel (2016). The researchers had three goals when conducting their study. The first goal was to the transition student-athletes undergo when they leave collegiate athletics; the second goal was to analyze whether or not the Theory of Work Adjustment (TWA) was being utilized and how frequently and the last goal was to "identify experts about the importance, applicability, and potential use of the elements of TWA" with student-athletes (Leonard & Schimmel, 2016).

This study utilized the Delphi method using three rounds and included eleven experts who were contacted via e-mail. The experts came from eight DI institutions and three DII

institutions from across the continental United States. The experts held either a master's or doctoral degree in higher education, sport and exercise psychology and counseling.

Round one of the Delphi study included open ended questions about TWA and qualitative content analysis was conducted for the 24 reflective statements produced by the experts. For round two, the experts were given the 24 statements and asked to rate the statements based on importance, applicability, and potential use using a five point Likert scale. The participants were allowed to give anonymous rationale for their rankings. All responses were compiled into an analysis summary. The data was organized into four main areas: future vocational skills, general academic information, transitional topics and identity development. The experts' responses differed regarding when to discuss the transition process with current student-athletes, but the experts agreed that "offering life skills courses throughout [the student-athletes'] careers will enhance the likelihood to 'catch' them when they are developmentally ready to [hear] the message"(Leonard & Schimmel, 2016, p.69). All of the expert participants agreed that a discussion about the transition that student-athletes will experience is necessary at some point in their careers. These discussions should be about vocational skill development, skills that are transferable into the job market, and plans for post-graduation.

With regard to TWA it was concluded that an individual's skills need to match the work they are performing and the work needs to match the individual's values in order for a student-athlete to be successful in the transition process. It is not only important for student-athletes to be aware of the skills they have but also be able to translate them into the real world after they have left collegiate athletics. The experts agreed that student-athletes gain values which include "compassion, companionship, health and fitness, personal achievement, public image,

sportsmanship, team cohesion and winning" from participating in collegiate athletics (Leonard & Schimmel, 2016, p.70).

The authors also discussed the positive and negative impact that athletic identity can have. Student-athletes spend the majority of their time focused on their sport so there is little time to fully develop other interests. Playing into the skills they have developed from sport, student-athletes may be aware of the skills they have developed but are unprepared for the devastation they may face losing their athlete-identity (Leonard & Schimmel, 2016).

Athletic Identity

All of the articles in this section focused on student-athletes' athletic identity. There were a total of four articles that fit this theme.

The first article in this section was by Murdock, Strear, Jenkins, Guarnieri, and Henderson (2014). The purpose of this study was to review a career development program administered at a United States university. The program was centered on preparing student-athletes for the transition into their professional life after graduation. Participants were male and female athletes at a NCAA Division I university near the Rocky Mountain region in the United States who attended one of the final two career intervention program sessions conducted during an academic semester.

One hundred ten athletes participated in the survey with a 26% response rate. Participants discussed their experience after attending the career intervention program sponsored by the athletics department staff and university career services at their university. Seventy one participants attended one presentation, 34 attended two or more presentations. Seventeen athletes reported visiting campus career services once, 89 reported never visiting campus career services. The university athletics department and career services conducted voluntary, one-hour

presentations focused on helping student athletes prepare for the transition from sport to a career. Materials and topics presented included life after sports, financial security, graduate school, job searching, etc.

The Lass Athletics Domain subscale was used to measure athletic identity and self-concept, and the perceptions of academics, social life and career development the athletes had about themselves. The subscale contained 5 items targeted towards athletic identity and motivation to continue their career as professional athletes. Participants used a seven-point Likert scale to rate their agreement or disagreement with the subscale items. SPSS was used for statistical analysis. Demographic variables (gender, race, first-generation student status), cumulative GPA, and participation in career program intervention sessions were analyzed using a hierarchical multiple linear regression model. The mean scores of the LASS Athletics Domain subscale was the dependent variable. Demographic variables, cumulative GPA, and number of career intervention sessions were entered as the independent variables. The student-athletes who participated in the study attended group-administered career intervention programs which were focused on the transition that student-athletes experience after graduation.

Overall student-athletes differed from their non-athlete peers because they show less of a "perceived need for occupational information, academic performance, and career maturity" (Murdock, et al., 2014, p.404). It may be because of this lack of perceived need that student-athletes are less inclined to use the tools and resources that are available to them. In this case, student-athletes were given the means to prepare for their career after graduation but their perception of the lack of importance of help with career development hindered their overall progress (Murdock, et al., 2014).

Results of this study supported previous findings that gender can play a large role in the career development process. The authors concluded that males seemed to "need more support and targeted interventions strategies in career planning" in order to prepare for their transition from collegiate athletics into their professional careers outside of sport (Murdock et al., 2014, p. 405).

The second article in this section was by Poux and Fry (2015). The purpose of this study was to consider the attitude NCAA Division I student-athletes have regarding the motivational climate on their particular team and their own career exploration, engagement, and athletic identity. Participants included 50 males, 50 females and one individual who did not identify gender NCAA Division I student-athletes who competed in football, basketball, track and field, rowing, baseball, softball, tennis, and golf. Participants were contacted to complete an online survey directly at athletic meetings or by email.

Motivational climate on an athlete's team was measured using the 21-item Perceived Motivational Climate in Sport Questionnaire (PMCSQ). This was evaluated using a five point Likert scale. Caring climate was measured using Newton et al.'s 13-item Caring Climate scale (CCS). The athlete's athletic identity was measured using the Athletic Identity Measurement Scale (AIMS). Occupational Exploration and Engagement was determined using the Student Occupational Engagement Scale (OES) and lastly the Career Decision Self-Efficacy Scale (CDESES) was used to assess the student-athletes' feelings of self-efficacy. Mean, standard deviation, and Cronbach reliability coefficients, Pearson correlation and canonical correlation analysis were conducted.

“Athletes' perceptions of caring and task-involving climates [within their teams] were positively associated with their athletic identity, along with their career exploration and

engagement” (Poux & Fry, 2015, p.366). Athletes who experienced caring and task-involving climates may be better prepared as students and as "holistic human beings" (Poux & Fry, 2015, p.367). The vast majority of Division I athletes do not get the opportunity to further their careers professionally; therefore it is vital to focus on career building early on in their collegiate career. Those who only begin to focus on career development towards the end of their collegiate career "find themselves in the predicament of seeking future employment, too often without proper training and preparation" (Poux & Fry, 2015, p.367). Allowing athletes to focus on career development and future endeavors beyond sport by having coaches foster a caring environment can allow athletes to develop a foundation for their future careers. If an athlete's sole focus is constantly centered around athletics it can negatively affect their career development.

The next article used for this section was by Lally (2007). The purpose of this study was to revisit and explore the changes in a student-athlete's identity that occurs during retirement from an athletic career. Three male and three female student athletes from a large urban Canadian university participated in the study. Canadian intercollegiate sport is comparable to that of NCAA DII sport in the United States. These athletes committed about 30 hours per week to their sport training.

This study utilized a retrospective approach to collecting data by asking participants to think back and recall their past experiences. It consisted of three in depth interviews, one prior to retirement, one month post-retirement and one-year post-retirement. The interviews were tape recorded and transcribed verbatim.

Inductive content analysis was conducted immediately after the first interviews were transcribed. First, Lally (2007) separated the interviews into meaning units, or portions of the text that present a single idea. Each meaning unit was then separated and imported into the

NUD*IST4 software. Meaning units were then tagged. This method was used to form a log of working hypotheses for the first interviews, then the second interviews, and lastly the third set of interviews. Common themes were grouped into properties, and then properties were reviewed and divided into categories in order to identify significance in the data.

Most of the participants developed a strong sport related identity early on in their lives, and many aspired to play on a national team, compete in the Olympics, or compete at the professional level overseas. During the third year of competing at the collegiate level the participants came to the conclusion that they would not be continuing their careers after graduation. As participants came to this realization they began to anticipate a loss of athletic identity. Many of the student-athletes anticipated a stage in their life between identifying as an athlete and their new self-identity, and some mentioned anticipating an identity crisis. Participants who had fostered strong bonds with teammates were afraid they would miss being part of the team. The participants reached out to former teammates to better understand the transition they were about to endure, and talked to teammates who were also approaching graduation. The participants reported the most significant step they took was consciously decreasing their athletic identity and emotionally withdrawing from their sport. The participants also began to redirect their desire to be physically active.

The last article in this section was by Sturm, Feltz, and Gilson (2011). The purpose of this study was to explore Division I and Division III student-athletes' athletic and student identity and determine whether identity changes with class level. Participants for this study included 66 Division I and 122 Division III athletes, 121 of whom were male and 67 were female. The student-athletes were recruited from Division I and Division III Midwest colleges and universities. Sixty three participants were freshman, 49 were sophomores, 49 were juniors and 27

were seniors. The athletic department at each school was contacted by phone and email in order to recruit the participants.

The student-athletes' athletic identity was determined using the Athletic identity Measurement Scale (AIMS), and their student identity was determined using the Measure of Student Identity (MSI). AIMS consisted of a ten item questionnaire using a seven-point Likert-type scale. The MSI included a fifteen item questionnaire utilizing a five-point Likert-type scale. The participants were given an envelope containing a demographic questionnaire, the AIMS questionnaire and the MSI questionnaire. Half of the envelopes had the AIMS first and half had the MSI first.

Levene's Test of Equality of Variance was used to analyze the data as well as a 2 x 2 x 4 (Divisional Status x Gender x Class Level) MANOVA test to determine if division status, gender or class level showed significant differences.

Results indicated that male and female Division I and Division III student-athletes had identity differences, although it was not included in the researchers' original hypothesis. At both the Division I and Division III levels females presented a weaker athlete identity and a "significantly stronger student identity when compared to males" (Sturm et al., 2011, p.302). Previous research supports this finding and shows that female student identity increases over time as they move through their years as college students. Contrary to females, overall males have more opportunities to play professionally; therefore they tend to hold onto a stronger athlete identity and weaker student identity.

Sturm, Feltz and Gilson (2011) concluded that "student-athletes at Division I schools have similar athlete and student identity levels as student-athletes at DIII schools" (Sturm et al., 2011, p.302). The study also concluded that the Division I schools do not emphasize athletic

identity more than Division III schools and Division III schools do not advocate for student identity more than Division I schools. The researchers determined that between class levels, student-athletes have a consistent level of identity from the time they are freshmen through their senior year.

Impact of Injury

Sometimes an injury ends an athletic career, pre-maturely forcing retirement. One article from the critical mass fit this category.

The article was by Stoltenburg, kamphoff, and Lindstrom (2011). The purpose of this study was to investigate the psychosocial effects that are associated with a student-athlete's transition out of sport due to a career ending injury through the use of the whole Conceptual Model of Adaptation of Career Transition.

In-depth interviews were conducted with seven former NCAA Division I and II student-athletes, five males and two females, all of whom suffered a career-ending injury. All of the participants had been former collegiate student-athletes, had endured a career-ending injury and within the last five years transitioned out of collegiate athletics. Coaches and athletic trainers were contacted to obtain contact information for student-athletes who had experienced career-ending injuries. Permission was granted by the student-athletes prior to giving contact information to the researchers.

Semi-structured interviews, lasting 35-60 minutes, were conducted with each participant either face-to-face with the researcher or via telephone. Each interview started with the participant completing a demographic questionnaire. All of the interview questions were based on the Conceptual Model of Adaptation of Career Transition. The interviews were audiotaped and transcribed verbatim. The first author also took field notes through the duration of the

interviews. The interview questions covered the following topics: circumstances surrounding the sport-career transition, psychosocial factors related to the sport-career transition, perceptions of control, athletic identity, developmental experiences, available resources for adaptations to career transition, and quality of career transition.

The researchers analyzed the specific interview content, then developed the themes that emerged from the interviews, and drew conclusions to pinpoint the meaning the participant was originally intending. Key phrases that emerged from the interviews were identified and corresponding concepts were labeled. Stoltenburg, Kamphoff and Lindstrom (2011) convened to discuss and agree to the themes. The authors pulled quotes from the interviews that corresponded with each theme. The authors used pseudonyms in order to preserve each participant's identity. In order to avoid researcher bias, triangulations were utilized.

Five themes emerged from the participant interviews: consequences of the injury, social support, athletic identity, nature of the injury and pre-retirement planning. Participants who had negative transition experiences felt sad, devastated, angry, bitter, helpless and lost, and those with a positive transition process were grateful and appreciative. Athletes experienced an initial shock that eventually lessened over time, as well as the negative feelings they had. When athletes were forced to make the tough decision to end their career, they found that although it was tough, the potential health risks they faced if they continued to compete did not outweigh their future quality of life. The student-athletes who were forced to make the decision themselves experienced a more difficult transition process than the student-athletes who were told by a physician that they could no longer compete. Similarly, the athletes who strongly identified as athletes experienced more severe psychosocial difficulties than those with weaker athletic identities.

Career Maturity

There were a total of two articles that focused on student-athletes' career maturity. The first article was by Linnemeyer and Brown (2010). The purpose of this study was to compare the career maturity, identity and career foreclosure levels of student-athletes, fine arts students and general students. Participants included 104 general students, 121 fine arts students and 101 student-athletes. Sixty percent of the 326 total undergraduate participants were women and forty percent were men.

The general student group completed their surveys either before or after their English, math, and psychology classes. Fine arts students attended a small Midwest art institute. The student-athletes competed at the NCAA division I men's soccer, women's volleyball, women's basketball, men's basketball, softball, men's tennis, women's tennis, rifle, men's golf and track and field for the same university as the general student participants. Student-athletes completed surveys during team meetings or after practice.

Linnemeyer and Brown's research focused on three main topics: career maturity, identity foreclosure and career foreclosure. The Career Maturity Inventory-Revised (CMI-R) was used to determine the participant's career maturity. The test was broken into two parts, the first to measure awareness of occupations and the decisions process choosing a career and the second was a 25 item Attitude Scale to identify perceptions of making career choices. A higher career maturity score indicated greater career maturity. The Objective Measure of Ego Identity Status was used to determine identity foreclosure status. Participants with a more foreclosed identity scored higher than those with less foreclosed identities. The last item the researchers measured was career foreclosure using the Commitment to Career Choices Scale (CCSC). Participants who reported higher scores had a stronger tendency to foreclose early when making career choices.

Student-athletes exhibited lower career maturity attitudes than general and fine arts students. Although the groups had differentiated in results the difference was not large. This may be due to few participants competing in revenue producing sports. Since it is unusual for athletes who compete in nonrevenue producing sports to continue their career professionally it forces the student-athletes to consider other career options. Additionally some, student-athletes tend to listen to others when choosing a career path instead of exploring their interests themselves. The student-athletes overall thought that if they began focusing on career exploration it would seem that they were unfocused on their sport and that could have negative consequences. Contrary to student-athletes, fine arts students tend to be more open and flexible when exploring career opportunities. Fine arts students were more likely to have a backup plan in place if they do not continue on professionally but because student-athletes have such a strong athletic identity they normally lack a backup career plan.

The last article in this section by Tyrance, Harris and Post (2013). The purpose of this study was to explore the relationship between athletic identity, race, gender, sport, and expectation to play professionally and Division I student-athletes' career preparation. Participants included 538 NCAA DI student-athletes from four Bowl Championship Series (BCS) conferences. The participants included 283 females and 255 males from seventeen different sports.

The researchers measured both athletic identity and career planning. Athletic Identity Measurement Scale (AIMS) was used in order to measure athletic identity for the participants. The items on the scale were rated using a seven point Likert-type scale. The Career Future Inventory (CFI) which consisted of 25-items measured using a five point Likert-type scale.

The researchers used both online and hard copies of the surveys in order to collect data from the student-athletes at each of the four institutions. A correlational research design was used to explore the degree in which athletic identity, race, gender, type of sport, and expectation to play professionally can indicate career planning attitudes among Division I student-athletes. Tyrance and Harris used SPSS for all statistical analyses.

The study concluded that a significant inverse relationship exists between athletic identity and career adaptability. The student-athletes who reported a stronger athletic identity felt that they were less prepared for the future changes in their career plans. Tyrance and Harris (2013) concluded that gender was the only variable that was significant when predicting career knowledge among the participants. The findings suggest that males "believed that they had a better understanding of the job market and employment trends than their female counterparts" (Tyrance & Harris, 2013, p.28). Therefore female student-athletes, like their male counterparts, spend a large portion of their time training and practicing for their sport and they do not have the opportunity to gain career knowledge.

Chapter 4

Results

The purpose of this chapter is to synthesize the results of the literature related to the transition student-athletes experience when leaving collegiate athletics and what institutions can do to prepare them. A total of ten studies were found suitable for the critical mass and were used to produce the results for this synthesis. Synthesizing the results from the critical mass will help answer the following research questions: (a) what do student-athletes experience when transitioning out of college sports?, (b) is there a difference between males and females when transitioning out of college sports?, (c) what are the experiences of DI and DIII student-athletes like?, (d) what is the impact of injury on the transition from student-athlete to a non-athlete?, (e) what are some of the strengths and weaknesses student-athletes bring to careers and life after college sports?, (f) what do colleges do to prepare student-athletes for life after college athletics?

What do student-athletes experience when leaving the world of college athletics?

Student-athletes will inevitably leave their sport for either normative or non-normative reasons and enter a transition period that can be both positive and negative for student-athletes at all levels. Student-athletes, during their third year of competition, started to realize that they would not be competing in their sport forever and that their athletic careers would soon come to a close (Lally, 2007). As graduation loomed student-athletes began to anticipate the loss of their athletic identity and started a period of crisis (Lally, 2007). Just one month after retirement from collegiate athletics student-athletes were met by a flood of emotions such as loss and sadness (Lally, 2007). At the one year post-retirement mark student-athletes with a new career or academic focus away from athletics had a much more positive transition experience (Lally, 2007).

Student-athletes who took the time to career plan and prepare for their life after collegiate athletics were able to redefine themselves early enough and were better prepared to cope with the loss of their athletic identity (Harrison & Lawrence, 2011; Lally, 2007). Student-athletes who were hesitant to actively career plan because of the possible negative perceptions of their coaches and teammates were less prepared to encounter their retirement transition (Linnemeyer et al., 2010; Murdock et al., 2014). The student-athletes with strong athletic identities who did no planning for their future outside of athletics encountered negative transitions because their focus was singularly on their sport and not their non-athletic careers (Poux & Fry, 2015).

Is there a difference between males and females when transitioning out of college sports?

Gender plays a significant role in both the career development of student-athletes and predicting student-athletes' career knowledge (Murdock et al., 2014; Sturm et al., 2011). Overall males seemed to need more support and targeted intervention strategies for career planning. Because they have more opportunities to continue their athletic careers professionally they tend to hold onto their athletic identity and avoid career planning outside of athletics (Murdock et al., 2014; Sturm et al., 2011). Although males seemed to need more support, often they believed that they had a better understanding of the job market than females (Tyranee, Harris, & Post, 2013). On the other hand, females presented a weaker athletic identity and a significantly stronger student-identity across both the Division I and Division III competition levels (Sturm, Feltz, & Gilson, 2011). Female student-athletes' student-identity also increased over time as females started withdrawing from their sport (Sturm, Feltz, & Gilson, 2011).

What are the experiences of DI and DIII athletes like?

Although the competition levels between Division I and Division III can be vastly different there are few differences regarding career planning. The vast majority of Division I and

almost all of Division III student-athletes unfortunately do not get the opportunity to further their athletic careers professionally so it is important to focus on career building early and throughout their college years (Poux & Fry, 2015). The student-athletes who did not focus on career planning until later in their athletic careers found themselves less prepared to enter the real world (Poux & Fry, 2015). Division I institutions do not emphasize athletic identity more than Division III schools and Division III schools do not emphasize student-identity among student-athletes more than Division I schools (Sturm, Feltz, & Gilson, 2011). Both Division I and Division III student-athletes present strong athletic identities and therefore, their transition experiences are equally challenging (Murdock et al., 2014; Sturm et al., 2011). Division I student-athletes were more hesitant to ask for help regarding career building opportunities because of the potential perceptions that others would have, perhaps it would seem they were withdrawing from their sport early and that teammates and coaches would think they did not care about their sport anymore (Murdock et al., 2014). The hesitation that these student-athletes have about career planning can negatively affect their transition into the real world and can hinder the career building process.

What is the impact of injury on the transition from student athlete to non-athlete?

The initial shock of a career ending injury can be overwhelming for collegiate student-athletes (Stoltenburg, Kamphoff, & Lindstrom Bremer, 2011). These injuries are associated with a range of emotional, psychological, social and behavioral effects during the transition period (Stoltenburg et al., 2011). For student-athletes, an injury may elicit a negative or positive experience when they face leaving their sport. Student-athletes who had negative experiences felt sad, devastated, angry, bitter, helpless and lost, and those with positive experiences felt grateful and appreciative (Stoltenburg et al., 2011). The student-athletes who were forced to make the

decision to end their athletic careers felt that the health risks they faced if they continued to compete did not outweigh their future quality of life (Stoltenburg, Kamphoff, & Lindstrom Bremer, 2011). The student-athletes who were told that their athletic career was over by a physician had a more positive transition experience than those who had to make the decision themselves (Stoltenburg, Kamphoff, & Lindstrom Bremer, 2011). The student-athletes who had non-normative transitions were less likely to have positive transition experiences than their peers who had normative experiences.

What are some strengths and weaknesses student-athletes bring to careers and life after college sports?

Student-athletes gain a variety of skills from competing in collegiate athletics which include: leadership, teamwork, time management, compassion, companionship, health and fitness, personal achievement, public image, sportsmanship, team cohesion, and winning (Bjornsen & Dinkel, 2017; Leonard & Schimmel, 2016). Because student-athletes' schedules place such high demands on them during their athletic careers they often lose the opportunity to explore career building opportunities, placing them behind their general student counterparts who are able to take the time to build their professional careers (Bjornsen & Dinkel, 2017). Tyrance et al. (2013) found that an inverse relationship exists between athletic identity and career adaptability. The stronger a student-athlete's athletic identity the less they are able to adapt to a new career outlook.

What do colleges do to prepare student-athletes for life after college athletics?

Among NCAA institutions there are few programs to truly help student-athletes adapt during the transition period and life after collegiate athletics. Division I coaches regarded the NCAA Life Skills program as being beneficial in creating well rounded student-athletes

(Bjornsen & Dinkel, 2017). Unfortunately this program can only help the student-athletes who participate and leaves those who do not participate behind. Lally (2007) noted that in order to help student-athletes positively transition into life after athletics the student-athletes needed to begin actively withdrawing their identities from sport. By making a conscious effort to decrease their athletic identity over time the student-athletes were able to make a smoother and more positive transition (Lally, 2007). Unfortunately, some student-athletes were hesitant to withdraw their identity from sport because of the perceptions their coaches, teammates and others may have so it is important for athletic administrators to help in this process (Lally, 2007; Linnemeyer et al., 2010; Murdock, 2014).

Due to the lack of organized programs to help student-athletes through the transition period it is recommended that academic support and life skills courses are available throughout college so that when the student-athlete is ready to receive the help they know exactly where to go (Bjornsen et al., 2017; Leonard et al., 2016). But it is also important that student-athletes begin career planning earlier rather than later in their athletic careers (Poux & Fry, 2015). Student-athletes who begin planning earlier in their athletic careers have a better transition process than those who wait (Poux & Fry, 2015). In order to begin the planning process early on it was recommended that athletic departments create mentoring programs to pair underclassmen with upperclassmen and upperclassmen with recent graduates in order to share similar experiences with each other (Poux & Fry, 2015).

Chapter 5

Conclusion / Future Research

Conclusion

In this synthesis, ten articles were explored in order to investigate the transition process that student-athletes undergo when leaving collegiate athletics. Research showed that the transition student-athletes experience is not a singular event but a process that requires proper academic and career planning preparation. Across Division I and Division III there were few differences in the experiences of student-athletes. Gender played a more significant role in the transition experience than level of competition with males requiring more targeted intervention programs because they generally have more opportunities to compete in their respective sport professionally so they often do not actively career plan when compared to female student-athletes. Athletes who retire under non-normative circumstances such as career-ending injuries had a more difficult time accepting that their athletic careers were over when they had to make the decision themselves. When a physician made the decision for them, their experience was more positive because it was out of their immediate control. For all of these student-athletes it is important to start planning early on in their college years in order to ease the transition into athletic retirement.

Future Research

In order to gain more knowledge about the transition student-athletes experience when leaving collegiate sport continued research must be conducted. The first suggestion for further research is to conduct longitudinal research with student-athletes because the transition is a process that is prepared for over time instead of a singular event. This would result in a more accurate description of the entire transition period. Many of the studies participants were enrolled

at one college or university therefore in order to collect data from a broader population it is recommended that several institutions be used in future studies.

Another research suggestion could be to conduct more research comparing Division I, II and III athletes. There is some existing research regarding Division I student-athletes but little research with Division II and III student-athletes. This research might reveal differences across divisional levels of college athletics. It is also suggested that research be conducted comparing and contrasting revenue producing sport and non-revenue producing sport student-athletes as well as student-athletes with and without athletics based scholarships.

Overall much of the research regarding the transition experiences of student-athletes that was found on the topic could not be included in the critical mass because of the age of the research. Further up to date research would be more useful for colleges and universities exploring this topic.

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Appendix

APA Citation	Purpose	Methods, Participants and Procedures	Data Analysis	Findings / Conclusions	Recommendations/ Limitations/Comparisons
<p>Harrison, C. K., & Lawrence, S. M. (2004). Female and male student athletes' perceptions of career transition in sport and higher education: A vision elicitation and qualitative assessment. <i>Journal of Vocational Education and Training</i>, 56(4), 485-506.</p>	<p>The purpose of the study conducted by Harrison and Lawrence was to further examine the perceptions that student-athletes have concerning the athletic career transition process.</p>	<p>Participants included 79 male and 64 female student-athletes with an average age of 20 who attended a NCAA Division II institution in South Carolina. One-hundred-and-three participants identified as white, twenty-seven as African America, seven classified as other, four were Hispanic and two were American Indian. The student-athletes competed in twelve sports including: "men's/women's tennis, men's/women's basketball, men's/women's soccer, men's/women's cross country, men's golf, women's volleyball,</p>	<p>Each of the written responses to the student-athlete profile, which was presented to the participants, were transcribed in order to be analyzed. Then the investigative team consisting of the two main researchers and two trained researchers used line-by-line coding, followed by open coding to determine the common themes that existed between participant's responses. Later, the investigative team discussed the major themes that they had identified.</p>	<p>The researchers found three major themes within the data: career path well planned, balancing academics and athletics, and positive role model.</p> <p>Career Path Well Planned <i>"The theme of Career Path Well Planned consisted of participants' statements that acknowledged the valuable career advice that Will Brooks (the student-athlete in the profile) gave to them 'Find a career that best suits your personality'".</i> After reading the student-athlete profile the athletes thought it was important to plan for a career that you are going to enjoy. The student-athletes</p>	<p>Future studies should investigate specific items from the LASS. The researchers also recommended holding an open forum for the student-athletes to share their personal stories.</p> <p>The student-athlete profile presented to the participants was male, future studies should use a female athlete profile for female participants and a male profile for male participants. Then a comparison can be conducted between female and male student-athletes.</p> <p>Questions 1, 2</p>

		<p><i>baseball and softball". Of the participant pool 21% of the student-athletes were first generations college students.</i></p> <p>Harrison and Lawrence used grounded and visual elicitation to conduct their study. <i>"Grounded theory is an interactive process by which researchers become more and more 'grounded' in the data and develop increasingly richer concepts and models of how phenomena emerge."</i> The goal is to understand an individual's experiences at the deepest level possible. <i>"Visual elicitation is a technique of interviewing in which photographs are used to stimulate and guide discussion between the</i></p>		<p>realized after reading the profile they did not necessarily have to leave sport all together after they retire from playing their sport. Participants gathered that the clearer your plan and vision are for your future the more success you will find. The student-athletes generalized that working in an area that best fits your personality will drive you further in your career. They also identified the importance of setting career goals for the future.</p> <p>Balance Academics and Athletics <i>"The theme Balancing Academics and Athletics involved participants' perceptions that to be a true 'student-athlete' one must juggle schoolwork with their athletic responsibilities".</i> The participants reflected</p>	
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		<p><i>interviewee and the researcher(s)."</i> The researchers also used coding in order identify themes.</p> <p><i>"The Life After Sports Scale (LASS) was developed based on relevant literature and previous instruments that investigated athletic identity issues in sport psychology and sport sociology. The LASS is a mixed-method 58-item inventory utilized to examine perceptions of the career transition process".</i> Participants were asked to complete the Life After Sports Scale which took approximately 30 minutes to complete. During the qualitative section of the LASS participants were asked to read a student-athlete profile and reflect how it related to their</p>		<p>that it takes determination to be successful both on and off the field, and your education truly matters in life. The student-athlete in the profile was able to use his education in his career beyond retirement from athletics. Will Brooks, the student-athlete in the profile, set goals early on as a student-athlete because he was able to see a life outside of football.</p> <p>Positive Role Model <i>"Positive Role Model involved participants looking towards Will Brooks in the profile as a role model and also using him as a motivator".</i> Brooks was inspiring to participants because he was able to achieve both athletically and academically during his time as a student-athlete. The participants noted Brooks' dedication</p>	
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		<p>own lives as student-athletes.</p> <p>Prior to data collection, five students and five student-athletes participated in a pilot study using the visual elicitation method to determine if the method would be useful to include in the overall study.</p>		<p>which allowed him to find success.</p> <p>The student-athlete profile presented to the participants gave them the <i>"opportunity to see a student-athlete succeed in both academics and athletics, as well as [succeed in] making the transition out of sport into the real world is encouraging and inspirational"</i>. The profile solidified the student-athletes thoughts that they can be invested in both academics and athletics while in college and also make a smooth transition into the work world successfully. For many students <i>"the college experience is like no other and the college years can be a difficult time for many students and student-athletes"</i>. Some college students lack the focus on their career because of</p>	
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				<p>distractions in their everyday lives. Participants expressed how "<i>inspired and encouraged they are to start preparing for their futures</i>". For the participants who had not yet prepared for their future or had failed to plan, completing the LASS forced them to start thinking about their non-athletic careers in which they hadn't previously planned for. For these particular student-athletes who had also had not anticipated their retirement due to either an injury or other factor had profound difficulty in their transition to a new portion of their life.</p> <p>Student-athletes who wanted to continue their athletic careers professionally realized early on that due to the lack of opportunities to</p>	
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			<p>compete beyond college that planning for their careers was significantly important.</p> <p>Many of the student-athletes viewed Brook's as a role model which encouraged many of the participants to consider planning for their futures. Harrison and Lawrence remarked that "<i>many media representations of current and former student athletes fail to expose their academic success and also fail to depict details of their careers after collegiate competition</i>". Having a role model that was able to succeed academically while in college was a positive experience for the participants. After participating in the study the participants began making career goals and plans. They became invested and</p>	
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				started to actively seek resources for career planning.	
<p>Lally, P. (2007). Identity and athletic retirement: A prospective study. <i>Psychology of Sport and Exercise</i>, 8.85-99.</p>	<p>The purpose of this study was to revisit and explore the changes in a student-athlete's identity that occurs during retirement from an athletic career.</p>	<p>Three male and three female student athletes from a large urban Canadian university participated in the study. Canadian intercollegiate sport is comparable to that of NCAA DII sport in the United States. These athletes committed about 30 hours per week to their sport training. Beth is 24, and a swimmer, she was completing an undergraduate degree in health and physical education at the time of the study. She continued for one additional year in order to complete her degree. At the time of the final interview she was completing an advanced degree in physiotherapy, and continues to stay active by</p>	<p>Inductive content analysis was conducted immediately after the first interviews were transcribed verbatim. First, Lally separated the interviews into meaning units, or portions of the text that present a single idea. "<i>Each meaning unit was separated from the original transcription using a hard return and then imported into NUD*IST4, a computer software program designed to assist in the analysis of qualitative data.</i>" Meaning units were then tagged. This method was used to form a log of working hypotheses for the first interviews,</p>	<p>Pre-Retirement Most of the participants developed a strong sport related identity early on in their lives, and many aspired to play on a national team, compete in the Olympics, or compete at the professional level overseas. During the participants third year of competing at the collegiate level the participants came to the conclusion that they would not be continuing their careers after graduation. As participants came to this realization they began to anticipate loss of athletic identity. Many of the student-athletes anticipated a stage in their life between identifying as an athlete and their new self-identity, and</p>	<p>Limitations There were a small number of student-athlete participants. Future research should use a larger sample of student-athletes.</p> <p>During the first set of interviews which were conducted during the athlete's last season of competition it was realized that the athletes had already contemplated their retirement from competition. Future research should begin interviews earlier in the athlete's career, as well as follow them over a longer period of time.</p> <p>Because the study was conducted with student-athletes the end of their athletic career was also the end of their academic career as an undergraduate student. But, many of the athletes were continuing into graduate school so</p>

		<p>participating in triathlons. Michele is 23, and was a senior on the volleyball team completing a degree in health and physical education at the beginning of the study. She completed her degree and was working at a local school district at the end of the study. She did not consider herself active at the time but was coaching two high school teams. Sean is 23 and was a men's basketball player. He earned his undergraduate degree in arts and science and was working as a teacher at a local school. Mike, 24, at the beginning of the study was a swimmer who was returning for his fifth year in order to complete his degree. At the completion of the study Mike was working in a management position</p>	<p>then the second interviews, and lastly the third set of interviews. <i>"The tags were compared to those with common themes were grouped into properties. Next, the properties were reviewed and those sharing common themes were grouped into categories, creating four layers of interpretation from the data. Finally, the meaning units in each of the properties were examined in order to define their special significance."</i></p>	<p>some mentioned anticipating an identity crisis. Participants who had fostered strong bonds with teammates were afraid they would miss being part of the team. The participants reached out to former teammates to better understand the transition they were about to endure, and also talked to teammates who were also approaching graduation. <i>"One of the most significant steps the participants reported taking was to proactively withdraw their identities from sport."</i> The student-athletes did not stop their training but rather <i>"consciously decreased their identity with the athlete role and the prominence of their athletic identities."</i> The student-athletes began to mentally withdraw from their sport and slowly</p>	<p>both transitions did not occur at the same time.</p> <p>Questions</p> <p>1</p>
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		<p>and was writing a novel about his family's history. Dan is 23 and swam in college. He completed his degree after finding interest late in his career. At the end of the study he was employed in his field of interest.</p> <p>This study utilized a retrospective approach to collecting data by asking participants to think back and recall their past experiences.</p> <p><i>Limitation: Some respondents' memories may have been faded and their overall perceptions of their transition into retirement may have been slightly influenced by their overall career in sport.</i></p> <p>This study consisted of three in depth interviews, one prior to retirement, one</p>		<p>remove themselves emotionally. The participants also began to redirect their desire to be physically active. Beth who was a swimmer started training for marathons and triathlons. Sara took up squash, and Sean began to strength train more regularly. Mike was the only participant who did not actively decrease his athletic identification.</p> <p><i>One Month Post-Retirement</i></p> <p>The events leading to retirement, such as the last practice, or the last game, for the student-athletes were challenging and evoked a flood of emotions such as loss and sadness. At the one month post-retirement mark the participants were actively seeking other outlets, exploring their personal interests outside of collegiate</p>	
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		<p>month post-retirement and one-year post-retirement. The interviews were tape recorded and transcribed verbatim.</p>		<p>athletics. Many of the participants were looking forward to new chapters in their life. Although the participants were first concerned they would feel isolated from their teams, at the one month mark several were still involved with their team's activities, and wanted to continue the friendships they had formed with their teammates outside of competition.</p> <p><i>One-Year Post-Retirement</i> At the one-year post-retirement mark Sean and Sara had completed teachers college and were employed at local schools. Beth and Michele were in graduate school, and Dan was still employed at the same company he was hired at just after graduation. The participants who had a</p>	
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			<p>new career or academic focus helped them in their transition. The participants who had withdrawn emotionally early on to focus on their careers outside of sport reported a much smoother transition overall. <i>"This almost immediate redirection of self into their advanced studies and professional employment precluded the identity crisis or confusion they had anticipated earlier in the retirement process."</i> Sara remarked that she could not dwell on the past and it was time to move on. Mike was the only participant who reported the transition into retirement as a struggle. He claimed that everything in his life was changing and that he felt a loss of his identity, only after a year was he able to</p>	
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			<p>solidify a new sense of himself.</p> <p>Conclusions <i>"The participants, with one exception, smoothly navigated through the retirement transition. They did not experience an identity crisis following sport career termination, consistent with earlier work suggesting athletic retirement is one of many life transitions."</i> Student-athletes who redefined their self-identity prior to leaving sport were better prepared to cope with the identity loss versus those who continued to have a strong relationship with their role as an athlete.</p> <p>Participants who anticipated their career terminations, such as those using up their eligibility, experienced smoother transitions than those</p>	
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				<p>who experienced career ending injuries or unanticipated retirement.</p>	
<p>Murdock, J.L., Strear, M.M., Jenkins, Guarnieri, M.A., & Henderson, A.C. (2014). Collegiate athletes and career identity. <i>Sport, Education and Society</i>, 21(3), 396-410.</p>	<p>The purpose of this study was to review a career development program administered at a United States university. The program was centered on preparing student-athletes for the transition into their professional life after graduation.</p>	<p>Participants were male and female athletes at a NCAA Division I university near the Rocky mountain Region in the United States who attended one of the final two career intervention program sessions conducted during an academic semester. 110 athletes participated in the survey with a 26% response rate. Participants reported their attendance at the career intervention provided by the athletics department staff and university career services. 71 participants attended one presentation, 34 attended 2 or more presentations. 17 athletes reported visiting campus career services once,</p>	<p>SPSS was used for statistical analysis. Demographic variables (gender, race, first-generation student status), cumulative GPA, and participation in career program intervention sessions were analyzed using a hierarchical multiple linear regression model. The mean scores of the LASS Athletics Domain subscale was the dependent variable. Demographic variables, cumulative GPA, and number of career intervention sessions were entered as the independent variables.</p>	<p>The student-athletes who participated in the study attended group-administered career intervention programs which were focused on the transition that student-athletes experience after graduation. Results of this study supported "<i>previous studies finding that gender can play a significant role in the career development of student-athletes</i>".</p> <p>Student-athletes overall differed from their non-athlete peers because they show less of a "<i>perceived need for occupational information, academic performance, and career maturity</i>". It is because of this lack of perceived need that student-athletes are less inclined to use the</p>	<p>Limitations This study was the first time using the LASS with Division I student-athletes so it is recommended that a larger sample size is used in the future.</p> <p>Recommendations Many of the student-athletes were not first-generation college students so it is possible that they had been exposed to career planning prior to Murdock et al conducting the study. It was recommended that future studies consider the significance of first-generation status on the career-athlete identity.</p> <p>Questions 2, 3, 6</p>

		<p>89 reported never visiting campus career services. The university athletics department and career services presented voluntary, one-hour presentations focused on helping student athletes prepare for the transition from sport to a career. Materials presented included life after sports, financial security, graduate school, job searching, etc. Participants were recruited to participate in the study survey during the last two out of seven presentations. The LASS Athletics Domain subscale was used to measure athletic identity and self-concept, and the perceptions of academics, social life and career development the athletes had about themselves. The subscale contained 5</p>		<p>tools and resources that are available to them. In this case, student-athletes were given the means to prepare for their career after graduation but their perception of taking help with career development hindered their overall progress.</p> <p>Murdock et al. concluded that males seemed to "<i>need more support and targeted interventions strategies in career planning</i>" in order to prepare for their transition from collegiate athletics into their professional careers outside of sport.</p>	
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		items targeted towards athletic identity and motivation to continue their career as professional athletes. Participants used a 7-point Likert scale to rate their agreement or disagreement with the subscale items.			
<p>Poux, K., & Fry, M. (2015). Athletes' perceptions of their team motivational climate, career exploration and engagement, and athletic identity. <i>Journal of Clinical Sport Psychology, 9</i>, 360-372.</p>	<p>The purpose of this study was to consider the relationship NCAA Division I student-athlete's have between their attitude towards a motivational climate on their particular team and their own career exploration, engagement, and athletic identity.</p>	<p>Participants included 50 male, 50 female and one individual who did not identify gender NCAA Division I student-athletes who competed in football, basketball, track and field, rowing, baseball, softball, tennis, and golf. "Fifty-three percent of respondents identified themselves as White, 43% as Black, 6% as Hispanic, and 3% as mixed race." 28% of participants were juniors, 23% sophomores, 20% freshmen, 20%</p>	<p><i>"Mean, standard deviation, and Cronbach reliability coefficients were calculated for each of the scales. Next Pearson correlation coefficients were calculated for each of the variables measured. Further, canonical correlation analyses were conducted to examine the relationship between the climate variables and the career exploration and</i></p>	<p>Task-Involving Climate "The coach values each athlete's personal effort, improvement and mastery; encourages cooperation among teammates, and considers mistakes to be part of the learning process." Ego-Involving Climate In an ego-involving climate competition is the top priority of the coach, rivalry between teammates is encouraged and athletes are punished if mistakes are made.</p>	<p>Recommendations Seldom research has been conducted with NCAA student-athletes across all three Divisions. Further research is needed comparing and contrasting the divisions, gender differences, scholarship versus non-scholarship athletes and athletes participating in revenue generating sports vs. non-revenue generating sports.</p> <p>Questions 6, 3</p>

		<p>seniors, 5% fifth-year seniors, and 3% identified as graduate students.</p> <p>Participants were contacted to complete an online survey directly at athletic meetings or by email.</p> <p>Motivational climate on an athlete's team was measured using the 21-item Perceived Motivational Climate in Sport Questionnaire (PMCSQ). This evaluated using a 5 point Likert scale. Caring climate was measured using Newton et al.'s 13-item Caring Climate scale (CCS). The athlete's athletic identity was measured using the Athletic Identity Measurement Scale (AIMS). Occupational Exploration and</p>	<p><i>engagement scale and athletic identity."</i></p>	<p>Caring Climate In a caring climate all teammates are treated with mutual respect and kindness. It is important that all teammates feel comfortable and valued among each other. This climate encourages optimal achievement in life experiences.</p> <p><i>"Athletes' perceptions of caring and task-involving climates within their teams was positively associated with their athletic identity, along with their career exploration and engagement."</i> Athletes who experienced caring and task-involving climates may be better prepared as students and as "holistic human beings". The vast majority of Division I athletes do not get the opportunity to further their careers</p>	
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		<p>Engagement was determined using the Student Occupational Engagement Scale (OES) and lastly the Career Decision Self-Efficacy Scale (CDESES) was used to assess the student-athletes' feelings of self-efficacy.</p>		<p>professionally; therefore it is vital to focus on career building early on in their collegiate career. Those who only begin to focus on career development towards the end of their collegiate career "<i>find themselves in the predicament of seeking future employment, too often without proper training and preparation</i>". Allowing athletes to focus on career development and future endeavors beyond sport by having coaches foster a caring environment can allow athletes to develop a foundation for their future careers. If an athlete's sole focus is constantly centered around athletics it can negatively affect their development regarding their career.</p>	
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<p>Stoltenburg, A. L., Kamphoff, C. S., & Lindstrom Bremer, K. (2011). Transitioning out of sport: The psychosocial effects of collegiate athletes' career-ending injuries. <i>Athletic Insight Journal</i>, 3(2), 115-133.</p>	<p>The purpose of this study was to investigate the psychosocial effects that are associated with a student-athlete's transition out of sport due to a career ending injury through the use of the whole Conceptual Model of Adaptation of Career Transition.</p>	<p>In-depth interviews were conducted with seven former NCAA Division I and II student-athletes, five males and two females, who suffered a career-ending injury. All of the participants had been former collegiate student-athletes, had endured a career-ending injury and within the last five years transitioned out of collegiate athletics. Coaches and athletic trainers were contacted to obtain contact information for student-athletes who had experienced career-ending injuries. Permission was granted by the student-athletes prior to giving contact information to the researchers.</p> <p>Semi-structured interviews, lasting 35-60 minutes, were conducted with each</p>	<p>The researchers analyzed the specific interview content, then developed the themes that emerged from the interviews, and drew conclusions to pinpoint the meaning the participant was originally intending. Key phrases that emerged from the interviews were identified and corresponding concepts were labeled. Stoltenburg, kamphoff and Lindstrom "<i>met to discuss and finalize the themes</i>". The authors pulled quotes from the interviews that corresponded with each theme. The authors used pseudonyms in order to preserve each participant's identity. In order to</p>	<p>Five themes emerged from the participant interviews: consequences of the injury, social support, athletic identity, nature of the injury and pre-retirement planning.</p> <p>Psychosocial Effects <i>"The participants experienced a range of emotional, psychological, social and behavioral effects during the adjustment process"</i>. Participants who had negative transition experiences felt sad, devastated, angry, bitter, helpless and lost, and those with a positive transition process were grateful and appreciative. Athletes experienced an initial shock that eventually lessened over time, as well as the negative feelings they had. When athletes were forced to make the tough decision to end their career, they</p>	<p>Limitations The study had a small number of participants who only included collegiate student-athletes. Future research should consider including high school athletes or professional athletes in order to compare across participant groups. The athletes also experienced a variety of injuries; future research could narrow the participants to a specific injury and compare different types of career ending injuries.</p> <p>Questions 4</p>
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		<p>participant either face-to-face with the researcher or via telephone. Each interview started with the participant completing a demographic questionnaire. All of the interview questions were based on the Conceptual Model of Adaptation of Career Transition. The interviews were audiotaped and transcribed verbatim. The first author also took field notes through the duration of the interviews. The interview questions covered the following topics: circumstances surrounding the sport-career transition, psychosocial factors related to the sport-career transition, perceptions of control, athletic, identity, developmental experiences,</p>	<p>avoid researcher bias, triangulations was implemented.</p>	<p>found that although it was tough, the potential health risks they faced if they continued to compete did not outweigh their future quality of life. The student-athletes who were forced to make the decision themselves experienced a more difficult transition process than the student-athletes who were told by a physician that they could no longer compete. Similarly, the athletes who strongly identified as athletes experienced more severe psychosocial difficulties than those with weaker athletic identities.</p>	
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		<p>available resources for adaptations to career transition, and quality of career transition.</p>			
<p>Bjornsen, A. L., & Dinkel, D. M. (2017). Transition experiences of division-1 college student-athletes: Coach perspective. <i>Journal of Sport Behavior</i>, 40(3), 245-268.</p>	<p>The purpose of this study was to investigate the influence coaches have during an athlete's transition out of collegiate athletics. Bjornsen and Dinkel also explored the unique viewpoint coaches have on existing academic and career support programming that exists to better prepare student-athletes during the transition process.</p> <p>Research Questions</p> <ol style="list-style-type: none"> 1. What existing academic and career-related supports/programming do coaches perceive to be most helpful for both current and transitioning student-athletes? 2. What factors do coaches perceive to be important to a successful transition from school and sport? 	<p>Participants A total of fourteen Division I NCAA coaches, twelve men and two women, participated in this study. Participants must have met the following criteria: must have been coaching long enough to see student-athletes transition out of their program and were the primary contact for alumni communication. The participants on average had been coaching for 11.6 ± 9.1 years and were either a head coach or assistant coach. Bjornsen and Dinkel contacted to Assistant Director for Academic Success (AADAS) to explain the goal of the study</p>	<p>The interviews were transcribed by graduate assistants and analyze by the authors "the process of horizontalization and identifying clusters of meaning". Then related statements from participants were grouped together to identify larger existing themes. The researchers independently coded their transcripts and then used Schlossberg's Transition Theory (STT) to for the deductive process to organize the themes.</p>	<p>Bjornsen and Dinkel's findings confirmed that the transition that student-athletes experience from sport into their non-sport careers is a complex process. Support, both interpersonal and institutional, over the past few years has increased across universities. The majority of participants highlighted the importance of dedicated academic support staff is before and during the transition process. Programs offered by the NCAA such as the Life Skills program was regarded by the coaches as beneficial in creating a well-rounded student-athlete. The program works to develop</p>	<p>Limitations There were a very small number of participants and the participants did not represent coaches from every collegiate sport. The study was conducted at a school that had transitioned from a Division II to Division I institution recently.</p> <p>Questions 6</p>

	<p>3. What additional supports/programming do coaches perceive to be needed to most effectively prepare student-athletes to successfully transition from school/sport to post-graduation or post-eligibility plans?</p>	<p>and to obtain help recruiting participants. Participants coached the following teams: baseball, basketball, golf, soccer, men's ice hockey, swimming and diving, tennis, women's track and field, and women's volleyball. The participants were contacted via e-mail, those who were interested scheduled interviews with the researchers.</p> <p>Procedure The researchers used a phenomenological methodology and conducted semi-structured interviews that were audio recorded and lasted no longer than one hour.</p>		<p>academic and athletic success in combination with personal wellbeing.</p> <p>The coaches concurred that the needs of athletes should be considered across their four years of college. For athletes, declaring a major in the early years of college can prematurely foreclose on their career exploration opportunities. Foreclosing early can narrow their focus to a single career path without allowing the athletes to gain hands on experience to determine whether or not they will enjoy their career. Participating in collegiate athletic is a demanding and time consuming endeavor for students. Therefore student-athletes tend to lack co-curricular involvement which can pose a barrier for</p>	
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				<p>athletes to gather "information and experiences" that can shape their careers post-graduation.</p> <p>It was recommended that athletic departments create mentoring programs in which underclassmen are paired with upperclassmen sharing the same academic majors as well as pair upperclassmen to newly graduated alumni. Pairing students with the same majors early on can give them insight on what is to come in their majors. Connecting student-athletes with recent alumni who can attest to their post-graduation transition experience can help current student athletes navigate this difficult process.</p> <p>The participants reported that skills</p>	
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				<p>and strengths that student-athletes obtain through their sport such as leadership, teamwork and time management will transfer to the real world. These student-athletes will enter a competitive job market forced to compete with general students who lack the demands of sports and were able to capitalize on career development opportunities.</p>	
<p>Linnemeyer, R. M., & Brown, C. (2010). Career maturity and foreclosure in student athletes, fine arts, and general college students. <i>Journal of Career Development</i>, 37(3), 616-634.</p>	<p><i>"The purpose of this study was to compare student-athletes, fine arts students, and general college students on level of career maturity, and identity and career foreclosure".</i></p>	<p>Participants included 104 general students, 121 fine arts students and 101 student-athletes. Sixty percent of the 326 total undergraduate participants were women and forty percent were men. 32.8% of participants were first year students, 16% were sophomores, 24.8% were juniors and 26.4% were seniors, the average age of</p>	<p><i>"The Career Maturity Inventory-Revised was used to measure participants' levels of career maturity and was divided into two main sections: the 25-item competence test that measured knowledge about occupations and decisions involved choosing a career and the 25-item Attitude Scale, which identifies</i></p>	<p>Student-athletes exhibited lower career maturity attitudes than general and fine arts students. Although the groups had differentiated in results the difference was not large. This may be due to few participants competing in revenue producing sports. Since it is unusual for athletes who compete in nonrevenue producing sports to continue their career</p>	<p>Limitations Participants were recruited from one university and one art institution in the Midwest. It was recommended that the study be replicated with all participants enrolled at the same university and across different regions of the United States. Only 11% of the student-athlete group participated in revenue producing sports which may have limited the researchers' findings.</p> <p>Questions</p>

		<p>the participants was 20.9.</p> <p>The general student group completed their surveys either before or after their English, math, and psychology classes. Fine arts students attended a small Midwest art institute. The student-athletes competed at the NCAA division I men's soccer, women's volleyball, women's basketball, men's basketball, softball, men's tennis, women's tennis, rifle, men's golf and track and field for the same university as the general student participants. Student-athletes completed surveys during team meetings or after practice.</p> <p>Linnemeyer and Brown's research focused on three main topics: career maturity, identity</p>	<p><i>attitudes and feelings towards making a career choice".</i> The participants responded to each of the items by agreeing indicated by a one or disagree indicated by a zero. Higher scores revealed greater career maturity.</p> <p><i>"The Objective Measure of Ego Identity Status [assessed] the extent to which each of the four ego identity statuses (diffusion, moratorium, foreclosure, and identity achievement) are present. Twenty-four items represent the four 6-item identity status subscales".</i> The participants used a "Likert scale ranging from (1) strongly agree to</p>	<p>professionally it forces the student-athletes to consider other career options. Additionally student-athletes tend to listen to others when choosing a career path instead of exploring their interests themselves. The student-athletes overall thought that if they began focusing on career exploration it would seem that they were unfocused on their sport and could have negative consequences. Contrary to student-athletes, fine arts students tend to be more open and flexible when exploring career opportunities. Fine arts students were more likely to have a backup plan in place if they do not continue on professionally but because student-athletes have such a strong athletic identity</p>	<p>1, 5</p>
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		<p>foreclosure and career foreclosure.</p> <p>Career Maturity The first item measured was career maturity which <i>"has been defined as the readiness to make career decisions and to cope with vocational and educational developmental tasks"</i>. Linnemeyer and Brown used the Career Maturity Inventory-Revised (CMI-R) to determine the participant's career maturity. The test was broken into two parts, one to <i>"measure knowledge about occupations and decisions involved in choosing a career"</i> and the other was a 25 item Attitude Scale to identify <i>"attitudes and feelings toward making a career choice"</i>. A higher career maturity score</p>	<p>(6) strongly disagree". Participants with higher scores had a more foreclosed identity.</p> <p><i>"The Commitment to Career Choices Scale (CCSC) consists of 28 items that measure exploration and foreclosure attitudes toward committing to a career choice. The CCSC includes the Tendency to Foreclose Scale (TFS) and the VEC dimension."</i> Responses were recorded using a 7-point scale; responses "ranged from (1) never true about me to always true about me ". Participants with higher scores showed a strong tendency to foreclose on career choices.</p>	<p>they normally lack a backup career plan.</p>	
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		<p>indicated greater career maturity.</p> <p>Identity Foreclosure The second item measured by Linnemeyer and Brown was identity foreclosure which "<i>is regarded as strong ideological or occupational commitment without sufficient exploration or planning, or without experiencing a crisis</i>". The Objective Measure of Ego Identity Status was used to determine identity foreclosure status. Participants with a more foreclosed identity scored higher than those with less foreclosed identities.</p> <p>Career Foreclosure The last item the researchers measured was career foreclosure which is "<i>the absence of exploration specific to the career process</i></p>			
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		<p><i>[and] the absence of exploration of various occupational alternatives is proposed to constrict personal and vocational identity".</i></p> <p>The researchers used the Commitment to Career Choices Scale (CCSC) to measure career foreclosure among the participants. Participants who reported higher scores had a stronger tendency to foreclose early when making career choices.</p> <p>The participants were also asked to complete a demographic questionnaire to obtain general information about the <i>"participants' sex, age, ethnicity, grade level and career aspirations/goals, and probable success rates"</i> in order to better describe the participant pool.</p>			
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<p>Sturm, J. E., Feltz, D. L., & Gilson, T. A. (2011). A comparison of athlete and student identity for Division I and Division III athletes. <i>Journal of Sport Behavior</i>, 34(3), 295-306.</p>	<p>The purpose of this study was to explore Division I and Division III student-athletes' athletic and student identity and determine if identity changes with class level.</p>	<p>Participants for this study included 66 Division I and 122 Division III athletes, 121 of which were male and 67 were female. The student-athletes were recruited from a Division I and Division III Midwest institute. 63 participants were freshman, 49 were sophomores, 49 were juniors and 27 participants were seniors. The athletic department at each school was contacted by phone and email in order to recruit the participants.</p> <p>The student-athletes' athletic identity was determined using the Athletic identity Measurement Scale (AIMS), and their student identity was determined using the Measure of Student Identity (MSI). AIMS consisted of a ten item</p>	<p>Levene's Test of Equality of Variance was used to analyze the data as well as a 2 x 2 x 4 (Divisional Status x Gender x Class Level) MANOVA test to determine if division status, gender or class level showed significant differences.</p>	<p>Division I and Division III athletes revealed that males and females had identity differences, although it was not included in the researchers' original hypothesis. At both the Division I and Division III levels females presented a weaker athlete identity and a "significantly stronger student identity when compared to males". Previous research supports this finding and shows that female student identity increases over time as they move through their years as college students. Contrary to females, overall males have more opportunities to play professionally; therefore they tend to hold a stronger athlete identity and weaker student identity.</p> <p>Sturm, Feltz and Gilson concluded that</p>	<p>Limitations The researcher's participant pool was limited because they only recruited student-athletes from one Division I and one Division III institution.</p> <p>Recommendations A longitudinal analysis structure would be more beneficial to collect data throughout a student-athlete's college career.</p> <p>Questions 3</p>
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		<p>questionnaire using a seven-point Likert-type scale. The MSI included a fifteen item questionnaire utilizing a five-point Likert-type scale.</p> <p>The participants were given an envelope containing a demographic questionnaire, the AIMS questionnaire and the MSI questionnaire. Half of the envelopes had the AIMS first and half had the MSI first.</p>		<p>"student-athletes at Division I schools have similar athlete and student identity levels as student-athletes at DIII schools. The study concluded that the Division I schools do not emphasize athletic identity more than Division III schools and Division III schools do not advocate for student identity more than Division I schools. The researchers also determined that between class levels, student-athletes have a consistent level of identity from the time they are freshmen through their senior year.</p>	
<p>Leonard, J., & Schimmel, C. (2016). Theory of working adjustments of student-athletes' transition out</p>	<p>Leonard and Schimmel had three goals when conducting their study; the first goal was to investigate the current discussion regarding the transition student-athletes undergo when they leave collegiate athletics, the second goal was to analyze</p>	<p>This study utilized the Delphi method using three rounds and included eleven experts who were contacted via e-mail. The experts came from eight DI institutions and three</p>	<p>Round one of the Delphi study included open ended questions about TWA and qualitative content analysis was conducted for the 24 reflective</p>	<p>The data was organized into four main areas: future vocational skills, general academic information, transitional topics and identity development.</p>	<p>Limitations The researchers collected data in a three month period that included the end of the fall semester, winter session and the start of the following spring semester which may have hindered the number of participants.</p>

<p>of sport. <i>Journal of Issues in Intercollegiate Athletics</i>, 9, 62-85.</p>	<p>whether or not the Theory of Work Adjustment (TWA) was being utilized and how frequently and the last goal was to "identify experts about the importance, applicability, and potential use of the elements of TWA" with student-athletes.</p>	<p>DII institutions from across the continental United States. The experts held either a master's or doctoral degree in higher education, sport and exercise psychology and counseling.</p>	<p>statements produced by the experts. For round two, the experts were given the 24 statements and asked to rate the statements based on importance, applicability, and potential use using a five point Likert scale. The participants were allowed to give anonymous rationale for their rankings. All responses were compiled into an analysis summary.</p>	<p>The experts' responses differed regarding when to discuss the transition process with current student-athletes, but the experts agreed that "offering life skills courses throughout [the student-athletes'] careers will enhance the likelihood to 'catch' them when they are developmentally ready to head the message". All of the expert participants agreed that a discussion about the transition that student-athletes will experience is necessary at some point in their careers. These discussions should be about vocational skill development, skills that are transferable into the job market, and their plans for graduation. With regard to TWA it was concluded that an individual's skills need to match the work</p>	<p>Recommendations Future research should include using TWA with specific groups or divisions.</p>
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				<p>they are performing and the work needs to match the individual's values in order to be successful in their transition process. It is not only important for student-athletes to be aware of the skills they have but also be able to translate them into the real world after they have left collegiate athletics. The experts agreed that student-athletes gain values which include "compassion, companionship, health and fitness, personal achievement, public image, sportsmanship, team cohesion and winning" from participating in collegiate athletics.</p> <p>The experts also discussed the positive and negative impact that athletic identity can have. Student-athletes spend the majority of their time focused on their sport so there is little time</p>	
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				<p>to fully develop other interests. Playing into the skills they have developed from sport, student-athletes may be aware of the skills they have developed but are unprepared for the devastation they may face losing their athlete-identity.</p>	
<p>Tyrance, S. C., Harris, H. L., & Post, P. (2013). Predicting positive career planning attitudes among NCAA Division I college student-athletes. <i>Journal of Clinical Sport Psychology</i>, 7(1), 22-40.</p>	<p>The purpose of this study was to explore the relationship between athletic identity, race, gender, sport, and expectation to play professionally with Division I student-athletes' career preparation.</p>	<p>Participants included 538 NCAA DI student-athletes from four Bowl Championship Series (BCS) conferences. The participants included 283 females and 255 males from seventeen different sports.</p> <p>The researchers measured both athletic identity and career planning. Athletic Identity Measurement Scale (AIMS) was used in order to measure athletic identity for the participants. The items on the scale were rated using a</p>	<p>"A correlational research design was used to analyze the extent to which athletic identity, race, gender, type of sport, and expectation to play professionally predict career planning attitudes among Division I college student-athletes". Tyrance and Harris used SPSS for all statistical analyses.</p>	<p>The study concluded that a significant inverse relationship exists between athletic identity and career adaptability. The student-athletes who reported a stronger athletic identity felt that they were less prepared for the future changes in their career plans.</p> <p>Tyrance and Harris concluded that gender was the only variable that was significant when predicting career knowledge among the participants. The findings suggest that males "believed that</p>	<p>Limitations Only four BCS level institutions were used in the study therefore a broader range of schools including DII and DIII in future research would allow for a wider range of responses.</p> <p>Little research has been conducted with Division I female student-athletes, so it is recommended that this group be further explored in order to fully understand why they have less career knowledge.</p> <p>Questions 2, 3</p>

		<p>seven point Likert-type scale. The Career Future Inventory (CFI) which consisted of 25-items measured using a five point Likert-type scale.</p> <p>The researchers used both online and hard copies of the surveys in order to collect data from the student-athletes at each of the four institutions.</p>		<p>they had a better understanding of the job market and employment trends than their female counterparts". Therefore female student-athletes, like their male counterparts, spend a large portion of their time training and practicing for their sport that they do not have the opportunity to gain career knowledge.</p>	
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