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Factors That Influence Student-Athlete Academic Major Selection

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FACTORS THAT INFLUENCE STUDENT-ATHLETE ACADEMIC MAJOR SELECTION

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ABSTRACT

This secondary research study explored four identified factors that influence student-athlete academic major selection. The purpose of this study was to explore how each identified factor influenced student-athlete academic major selection, including athletic coaches, student-athlete identity, academic advising, and career exploration (Amran, 2013; Andrews, et al., 2017; Henrion, 2009; Kelly, 2009). There were no participants in this study and data collection was based on a content analysis of 20 peer-reviewed studies. Several themes were identified in relation to attributes directly and indirectly influencing the academic major selection for each of the four factors (Amran, 2013; Andrews et al., 2017; Henrion, 2009; Kelly, 2009). For athletic coaches, themes included Balanced Coaching for both Sport and Academic Success, Coach Prioritizes Sports Success, and Coaches' Influence on Time Management. For student-athlete identity themes included Time Dedication Based on Identity, Athletic Success as a Priority, Academic Success as a Priority, Balanced Athletic and Academic Identity, and Academic Engagement. For academic advising themes included Advising in Support of Sports and Advising in Support of Academics. Lastly, for the factor career exploration, themes included Time Management Skills, Inspirational Influences, Engaged Career Development, and Life Goals/Aspirations/Personal Interests, Disengaged Career Development, and Career Interest Development. Recommendations for this study are to develop a workshop for coaches to build a balanced academic and sport success coaching style and to provide a college success program for

student-athletes in high school to strengthen their identity in various interests and career fields as well as selecting an academic major based on their interests. Additionally, recommendations include providing time management courses in high school and during college orientation to help student-athletes balance both their sport and academics.

Keywords: student-athlete, academic major, athletic coaches, student-athlete identity, academic advising, career exploration.

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CHAPTER 1

Introduction

Student-athletes have been a unique group of students known for their identity as a student in pursuit of academics as well as an athlete in pursuit of their sport (Henrion, 2009). While both academics and sports have been recognized as valuable opportunities that can lead to success in sports and future career opportunities based on skills that are independent of sports talent, the reality is that often many student-athletes have struggled in achieving success both in their sport and their academics (Beauchemin, 2014). As a result, often a large number of student-athletes have prioritized their sport over their academics, leading to missed academic opportunities and missed future careers opportunities independent of their sport (Jolly, 2008). A research study completed in the year 2016 dedicated to student-athletes at Duke University highlighted that many of Duke University's student-athletes playing college sports (which are known as sports played at the college level), found that student-athletes did not allocate time to studying and completing coursework by the expected due dates (Mendes, 2016). Moreover, the outcome of not completing coursework by expected due dates may have been related to prioritizing a sport and not prioritizing their academic major (Mendes, 2016; Vermillon, 2010). On the other hand, a research study by Pauline (2010) found that lacrosse student-athletes had decided to attend a college based on academic pursuits in relation to the academic majors available and career opportunities upon academic program completion.

In further highlighting scholastic concerns, the false academic representations of 12 student-athletes who had their coursework completed by a tutor at Missouri State University were disqualified from post season college football games (Lancaster, 2019). In light of understanding the lack of academic prioritization for some student-athletes, concerns have also

arisen from student-athletes selecting academic majors based on their athletic schedules (Finch, 2007). For example, a study by Finch (2007) based on student-athletes both male and female from a variety of sports found that student-athletes aspiring towards completing a degree program often made choices that would allow them to remain eligible to play college level sports. Similarly, a study by Fisher et al. (2010) found that football student-athletes selected less academically demanding academic majors for the purposes of prioritizing their athletic interests. Moreover, an Australian study by Cosh and Tully (2014) found that student-athletes, both male and female from a wide variety of sports, prioritized achieving success in their sport over their academic success. Each example of different groups of student-athletes prioritizing excelling in athletics over academics highlighted the need for student-athletes to have a better understanding of their choices and of the value of an academic major.

Some research suggests that student-athletes' choosing to prioritize sport over selecting and pursuing an academic major has been a contributing reason for lack of academic success (Cosh & Tully, 2014; Finch, 2007; Fisher et al, 2010; Hildenbrand & Sanders, 2010). For example, some student-athletes may believe that their future career would be in sports as an athlete, thereby overlooking the importance of academic success. Some student-athletes have also engaged in academic clustering, which refers to a large group of student-athletes selecting the same academic major that is often classified as a relatively less demanding major, allowing for successful sports participation (Fisher et al., 2010). A study by Hildenbrand & Sanders (2010) found that student-athletes engaged in academic clustering because their primary interest was sports' success instead of academics. Perhaps if student-athletes achieved a stronger understanding of the importance of both sport and academic success earlier on in high school, then selecting an academic major and prioritizing coursework completion may have been

strongly instilled in student-athlete outlooks towards college (Finch, 2007).

Student-Athletes and Academic Major Selection

To help student-athletes identify significant attributes to consider in the decision-making process of selecting an academic major, it was important to closely examine factors that contributed towards the academic major selection process of student-athletes. Exploring each factor in depth led to identifying influential components in relation to each factor, and in relation to the influential components that contributed towards the decision-making process of selecting an academic major. The dominant factors in relation to student-athlete academic major selection that were examined in this study included athletic coaches (Amran, 2013), student-athlete identity (Henrion, 2009), academic advising (Kelly, 2009), and career exploration (Andrews et al., 2017). These four factors were identified in previous studies as influencing student-athletes in regard to academic major selection. Prior research included a study by Amran (2013) titled, 'The Perceived Importance Coaches Have on Student-Athlete Academic Performance', which emphasized the role of coaches in regard to student-athlete academic success, academic decisions, and academic choices. Additionally, a study by Henrion (2009) titled, 'Key Challenges Facing Student Athletes and Connections to Their Choice of Major', explored the connection between student-athlete identity and academic major selection. For example, some student-athletes indicated that they considered their identity to be a student just as much as an athlete, and approached academic major selection based on career or academic interests (Henrion, 2009). A study by Kelly (2009) titled, 'Advising the College Student-Athlete: Issues and Strategies', outlined how academic advising could influence academic major selection. Furthermore, a study by Andrews et al. (2017) supported by the NCAA titled, 'Student-Athlete Career Development', outlined strategies for developing career skills and tools specifically

catered to student-athletes.

The first factor examined was athletic coaches. A study by Wilson (2017) outlined how the NCAA held athletic coaches accountable for the academic success outcomes of student-athletes, which included graduation. Additionally, some student-athletes felt strongly influenced in selecting a college based on the athletic coaches. A study by Lin, Paulson, Romsa, Romsa, & Walker (2017) found that the second most influential factor for college selection by both male and female track and field student-athletes was the athletic coach, with no mention of degree programs or academic major being a factor for college selection.

Coaches may also play a strong influential role in encouraging student-athlete academic careers. A study by Amran (2013) found that some coaches supported academic success through expressing the value of academic degree completion and encouraged student-athletes to attend class and study. Similarly, a Canadian-based study that focused on student-athletes by Banwell & Kerr (2016) found coaches believed that their roles were to not only help student-athletes excel in their sport, but to also take on the responsibility of helping student-athletes succeed in academics and achieve life skills.

In contrast, a study by Pellegrino & Saffici (2012) highlighted how some athletic coaches encouraged student-athletes to select academic majors that were less demanding solely for the purposes of ensuring academic eligibility could be met. More specifically, a study by Finley & Fountain (2010) focused on football student-athletes and found that athletic coaches were often more concerned with student-athletes winning games than succeeding in their academics and future careers.

The second factor that was examined focused on the identity of student-athletes in relation to their sport. A high level of athletic identity and passion towards a sport could

influence important academic decisions, with one such decision being the selection of an academic major (Feltz, 2011). For example, athletes that strongly associated their identity as an athlete and not in relation to other professional skills or talents were more likely to make decisions based on achieving success as an athlete and excelling in their sport (Finch, 2007). Moreover, identifying strongly as an athlete could lead to selecting an academic major solely for the purposes of being eligible to play or dedicating more time to sports (Henrion, 2009). Therefore, by exploring additional talents and traits early on, student-athletes may associate their identity with additional passions independent of their sport (Finch, 2007; Lee & Martens, 1998).

The third factor that was examined focused on academic advising, as advisor roles have often provided guidance to student-athletes toward academic and career plans (Smith & Vaughn, 2018). For example, a study by Smith & Vaughn (2018) focused on a total of 115 athletic academic advisors from numerous Division I colleges across the United States, and highlighted that student-athlete successes achieved both academically and in sports often depended on the advisement of athletic academic advisors in college. The study also found that the outcome of student-athletes identifying career interests often led to a higher level of passion in regard to pursuing academics (Smith & Vaughn, 2018). Therefore, advisors may influence future academic major selections of student-athletes by working with student-athletes to better understand how their interests and skills relate to different careers in relation to specific academic majors (Smith & Vaughn, 2018).

Similarly, an article by Kelly (2009) highlighted various ways that advisors contribute to academic success for student-athletes. One approach involved addressing low levels of confidence many student-athletes experienced toward academics (Kelly, 2009). Advisors could also address athletes' career interests and help them identify specific academic majors that align

with the particular career interest a student-athlete selected (Kelly, 2009). Kelly's (2009) findings further strengthened recommendations for this approach through highlighting the importance of aligning a number of academic majors with specific career fields in law, business, or medicine. In further echoing the academic success strategies by Kelly (2009), a study by Monda, Etzel, Shannon, & Wooding (2015) found that freshman football student-athletes who had clear academic goals and academic support had higher levels of motivation and interest in regard to academic success. Although the study by Monda, et al., (2015) focused on football student-athletes, the findings may also benefit student-athletes belonging to various other sports.

Finally, the fourth factor that was examined focused on skill sets identified in relation to career exploration, as engaging in career exploration could help student-athletes identify personal skills in addition to sports skills (Ihle Helledy, 2003). Identifying additional skills independent of sports skills may also incline student-athletes toward selecting future careers based on additional skills, which align with specific academic majors (Ihle Helledy, 2003). For example, Edmonson (2016) highlighted in his book titled, "Major in Happiness, Debunking the College Major", how students could select an academic major that aligned with their specific talents and future career interests. Edmonson (2016) also highlighted the importance of career exploration, which includes career assessments, personality assessments, volunteer experiences, and part-time job experiences. Although Edmonson (2016) focused on all students, with student-athletes being a part of the bigger umbrella of students, the steps and processes to select an academic major based on identifying various interests could also be beneficial to student-athletes as well in regard to uncovering various talents in addition to their sport. Similarly, a study by Ihle Helledy (2003) focused on student-athlete career development and the importance of skill development in relation to identifying career interests based on a number of factors, which included adaptability,

informed decision-making, self-exploration, career planning, and psychosocial development. Through combining the career exploration strategies of both Edmonson (2016) and Ihle Helledy (2003) early on during high school, student-athletes may discover career interests that relate to academic majors prior to attending college for the purpose of fulfillment toward academic goals in addition to their sports goals.

Additionally, in taking a look at more specific sports-focused studies with differences in ratio of male to female participants, a study by Burns et al. (2013) focused on student-athletes, both male and female, from a variety of sports that included ice hockey, basketball, lacrosse, tennis, and track. The study found that required academic support programs for student-athletes that integrated the component of career exploration, led to positive outcomes in regard to career related decision making. As the study focused on 158 NCAA Division I student-athletes from a variety of sports, the positive outcomes from the study may also benefit up and coming student-athletes in regard to academics and career decision-making (Burns et al., 2013), with the component of career decision-making also being fundamental toward selecting the right academic major (Burns et al., 2013; Edmonson, 2016).

It is important for advisors, coaches, and any individuals that play a part in mentoring student-athletes for success both academically and in pursuit of their sport, to provide strong leadership and college success tools for student-athletes throughout their years in high school and college (Henrion, 2009). Providing student-athletes with college and career success tools early on in high school could help student-athletes make informed decisions on future academic major selections, as well as future career opportunities reflective of various talents, interests, as well as skill sets, and not simply their sport of interest (Finch, 2007).

Selecting an academic major has been an important step towards helping students prepare for future careers opportunities (Porter & Umbach, 2006; University of California Berkeley, *n.d.*), as well as helping students identify skills and interests in relation to future academic and career interests (Nantz, Nunn, Rotrosen, & Schanzenbach, 2017). Selecting academic majors have also been important from a knowledge perspective and provides insight into the types of career opportunities that students may pursue. Additionally, placing importance on carefully selecting an academic major may prevent students from being involved in a career that they dislike, and instead pursue a career that they are skilled towards based on an academic major that they have selected (Williams, 2017). As student-athletes are considered students first (NCAA, *n.d.*), the importance of selecting an academic major may also impact student-athletes.

Nevertheless, some student-athletes may be geared towards dedicating their future career in sports, leading to prioritizing sports over academics, which highlights the importance of student-athletes identifying skills and interests in relation to academic majors that are independent of their sport (Lederman, 2003; Andrews, et al., 2017). With sports being one skill set, it is important for student-athletes to not limit themselves to simply one skill set in relation to potential future careers, but to also have made the most of their academic major by seeking value in aligning an academic major selection with additional interest based careers (Lederman, 2003; Andrews, et al., 2017).

Statement of the Problem

For student-athletes, selecting an academic major reflective of future career interests in addition to their sport is an important step (Henrion, 2009). Specific factors have been identified in previous research studies as significant determinants that influence student-athlete academic major selection, which include athletic coaches, student-athlete identity, academic advising, and

career exploration (Amran, 2013; Andrews, et al., 2017; Henrion, 2009; Kelly, 2009). As identifying key factors that have been influential in the academic major selected by student-athletes has provided a stronger understanding of general influences in the academic major decision-making process (Amran, 2013; Andrews, et al.; Henrion, 2009; Kelly, 2009), it is also important to achieve a better understanding of how each identified factor has influenced the academic major selected by student-athletes for the purposes of discovering detailed attributes that are a shared influence found within each identified factor, and between each of the four factors, while also exploring influences found in influencing academic major selection towards specific academic interests and career fields, or in supporting eligibility to play college level sports.

With minimal literature available in relation to exploring how each identified factor has influenced student-athlete academic major selection based on a collection of studies, the statement of the problem for this study is the limited information available concerning how each identified factor has influenced the academic major selected by student-athletes (Amran, 2013; Andrews, et al., 2017; Henrion, 2009; Kelly, 2009). There is a paucity of information relating to influential attributes found within each of the identified factors individually, as well as common influences between the four identified factors towards student-athlete academic major selection (Amran, 2013; Andrews, et al., 2017; Henrion, 2009; Kelly, 2009). For example, with athletic coaches being an identified factor, a better understanding of the influence of athletic coaches towards student-athlete academic major selection is essential. Achieving a better understanding of how each factor has influenced student-athlete academic major selection within and between each identified factor can be beneficial in helping student-athletes become more informed of specific attributes to consider incorporating in their decision-making process when selecting an

academic major, while also enhancing any programs or methods of assisting student-athletes in the academic major selection process for specific roles such as academic advisors and athletic coaches (Amran, 2013; Andrews, et al., 2017; Henrion, 2009; Kelly, 2009).

Purpose of the Study

The purpose of this study was to explore how each identified factor has influenced student-athlete academic major selection, with the identified factors including the athletic coaches, student-athlete identity, academic advising, and career exploration (Amran, 2013; Andrews, et al., 2017; Henrion, 2009; Kelly, 2009). Each identified factor was explored based on a collection of studies that focused upon influences on academic major selection relating to each individual factor, and between each of the four identified factors. By understanding how each of the identified factors have influenced academic major selection, fundamental attributes of each factor that has influenced the academic major selection process for student-athletes could be better understood.

Research Questions

As the purpose of the study was to explore a collection of studies relating to each of the four identified factors that have influenced student-athlete academic major selection (Amran, 2013; Andrews, et al., 2017; Henrion, 2009; Kelly, 2009), the following four research questions were presented for this study:

1. How do athletic coaches influence student-athlete academic major selection?
2. How does student-athlete identity influence student-athlete academic major selection?
3. How does academic advising influence student-athlete academic major selection?
4. How does career exploration influence student-athlete academic major selection?

Conceptual Framework

With social identity having contributed significantly toward the academic major selection of student-athletes, the conceptual framework of this research study focused on two dominant theories. Social Identity Theory, originally developed by Henri Tajfel and John C. Turner, was selected as the theory as it focused on how one's identity in relation to various social groups that one associates with and feels a strong sense of belonging to could play a dominant role in regard to decisions that one makes in life (Feltz., Gilson, & Sturm 2011; Tajfel & Turner, 1986). Social Identity Theory also provided a strong framework for this study in relation to how individual social identities of student-athletes may influence their individual interests, hobbies, and social groups, which may play a strong part in influencing academic major selection (Feltz, et al., 2011; Tajfel & Turner, 1986). For example, if a student-athlete primarily associates his or her identity with his or her sport, then the sport may play a dominant role in the type of academic major that he or she selects (Moses & Rubin, 2017). In contrast, if a student-athlete associates his or her identity with his or her sport and various other activities, for example cooking, public speaking, or fine arts, then he or she may select an academic major based on those other aspects that he or she associates with his or her identity (Moses & Rubin, 2017).

Secondly, Cognitive Dissonance Theory was selected in supporting this research study as the theory highlighted the conflicting perspectives that student-athletes may have experienced in a situation, trait, or behavior relating to their academics or sport (Festinger, 1957). Cognitive Dissonance Theory focuses on an individual experiencing a contradictory and discomforting frame of mind in regard to conflicting thoughts he or she may have towards ideas, values, problem-solving and decision-making (Festinger, 1957). Therefore, the connection of Cognitive Dissonance Theory to student-athlete academic major selection was evident in that student-

athletes may have experienced conflicting perspectives in regard to selecting an academic major based on interests that were independent of their sport, or based on the sole purpose of succeeding in their sport (Festinger, 1957). For example, the academic major selected by student-athletes in relation to interests separate from their sport may have led to high academic demands that resulted in the potential for poor time commitment to their sport, poor sports performance, or eligibility difficulties (Terrell, 2012), which therefore creates a conflicting perspective on placing more importance on academics than their sport (Festinger, 1957). In contrast, selecting an academic major based on sports prioritization could have led to academic clustering (Dent et al., 2014). Academic clustering may have also led to student-athletes experiencing cognitive dissonance in placing their sport as a priority over their academics (Festinger, 1957; Fisher et al. 2010).

Potential Limitations and Assumptions

The first limitation of the study was the number of available research studies published that related to each of the four factors influencing student-athlete academic major selection. Secondly, this study was limited to the responses provided by student-athletes in each of the research studies selected. Thirdly, the student-athlete sample size in each study did not represent every student-athlete in college sports, as not every student-athlete that participated in college sports was a part of the sample in each selected study. Fourthly, the results of each selected study were limited to the student-athletes that chose to participate in the specific study.

Additional limitations included the methodology limitations of each study, as some studies were limited to solely a quantitative or qualitative study. Additionally, studies that utilized a survey as the selected instrument to collect data were limited to the preset survey

response selections for most survey questions that were not open-ended, which may have led to student-athletes selecting a response that matched closest to their perspective (Creswell, 2015).

Limitations also include that this study was a secondary research study, and therefore limited to data collection from the 20 studies selected. Additional limitations included that influential attributes found were based on student-athletes from various sports and may not have included all sports that exist for student-athletes.

Assumptions of this research study included that the results found from a collection of studies were reliable based on participants of each study accurately interpreting questions and responding accordingly. Assumptions also included that participants of each study honestly responded to questions involved in each of the individual research studies for the purposes of ensuring accuracy, and that the questions in each research study were valid and reliable (Creswell, 2015).

Researcher Bias

Researcher bias was mitigated by ensuring that the study was beneficial to all universities or colleges interested in discovering influential factors that influenced student-athlete academic major selection by focusing on student-athletes in general and not one specific gender, sport, or division of student-athletes. Secondly, the researcher's occupation has focused upon providing leadership workshops and leadership coaching for students that belong to various high schools, sports clubs, and recreation clubs, as well as providing students with experiential learning opportunities within various industries, including entertainment, sports, and hospitality. Professional experience both led to recognizing the importance of this topic and has influenced researcher beliefs about this topic. To address this influence, researcher bias was minimized by ensuring that the study was not restricted to the researcher's knowledge of student-athlete

interests by selecting numerous studies with various student-athlete participant groups. Utilizing a theoretical framework as a fundamental component regarding the foundation of this research study also contributed to reducing researcher bias (Grant & Osanloo, 2014). Additionally, researcher bias similar to selection bias in selecting studies with only specific sports was also avoided by selecting a variety of studies that focused on numerous sports (Noble & Smith, 2014).

Significance of the Study

This study is significant as the findings explored how specific attributes relating to athletic coaches, student-athlete identity, academic advisors, and career exploration influenced student-athletes in selecting an academic major, as well as identifying gaps and discovering additional factors that may have been fundamental toward helping student-athletes select an academic major. The significance of this study also extends to both secondary education and higher education leadership, as student-athletes in high school that are interested in pursuing college will likely experience the academic major selection process if they plan to pursue college (Ihle Helledy, 2003; Terrell, 2012). Additionally, student-athletes entering their college years may have experienced the academic major selection process (Ihle Helledy, 2003; Terrell, 2012).

Moreover, the findings of this research study may significantly contribute towards benefiting various universities by highlighting key elements of the academic major selection process for student-athletes, while also identifying any gaps that exist in findings and recommendations, which may also be beneficial for future research studies that focus on exploring the student-athlete academic major selection process.

Additionally, the findings of this study featured how student-athlete identity has been significant toward the academic major selection process for student-athletes (Jolly, 2008), while

also highlighting the importance of enhancing and developing academic and career tools for student-athletes (Henderson, Jenkins-Guarnieri, Murdock, & Streat, 2014). Furthermore, the findings of this study provided additional insight into the important roles that academic advisors play in student-athlete academic major selection (Martin, 2017), while also achieving a better understanding of the role that athletic coaches have played in helping student-athletes towards selecting an academic major (Amran, 2013).

Definition of Terms

Student Success:

Students achieving success academically or within a career, with the support of the educational institution or educational institutions that students have attended (Highpoint, 2017).

Academic Advisor:

Advisors that assist students with various components relating to academic success, including academic major selection, study skill development, academic support relating to learning needs, and academic plans to achieve educational goals (California State University Bakersfield, *n.d.*; The University of Iowa, *n.d.*).

Career Interests:

Specific careers that an individual is interested in pursuing (Stipanovic, Stringfield, & Witherell, 2017).

Athletic Eligibility:

Standards and requirements set by an athletic association overseeing college sports that must be achieved by student-athletes in order for student-athletes to obtain permission to play a college sport (NCAA, *n.d.*)

Fulfillment:

An individual's level of content in regard to achievement and success within their academic career and components related to their academic success (Elias, 2016).

Academic Major:

A specific field of study that a student selects to specialize in (Moldoff, 2017).

Full Potential:

An individual's ability to achieve success in each of their talents, interests, and skill set, while also achieving outlined goals successfully (Matos, 2017).

Student-Athlete:

An individual that is a student and plays a competitive sport for a specific educational institution (Bradley, Conway, & Gomez, 2016).

College Sports:

Sports played by student-athletes at the college level (Lederman, 2003).

Revenue Generating Sports:

Sports that produce revenue for the college through ticket sales and sports merchandise (Mendes, 2016).

Athletic Coach:

Coaches that develop and instruct athletes for specific sports in regard to sports performance for specific sports teams, with knowledge regarding various components of sports skills and regulations (McKay, 2019; Payscale, *n.d.*).

Conclusion

With various studies focused upon factors influencing the academic major selection of student-athletes, the statement of the problem for this study is the limited information available regarding how each identified factor has influenced the academic major selected by student-athletes, as well as influential attributes found within each of the identified factors individually and between each of the identified factors (Amran, 2013; Andrews et al., 2017; Henrion, 2009; Kelly, 2009). As the dominant factors identified included athletic coaches, student-athlete identity, academic advising, and career exploration, the purpose of this study was to explore a collection of studies that focused on how each identified factor has influenced student-athlete academic major selection (Amran, 2013; Andrews et al., 2017; Henrion, 2009; Kelly, 2009). The significance of this study was the discovery of rich details regarding how specific influential attributes in relation to each of the four factors have influenced student-athlete academic major selection. As selecting a meaningful academic major has been an important step for student-athletes (Finch, 2007), each of the identified factors that influenced the academic major selection of student-athletes are explored in the next chapter.

CHAPTER 2

Literature Review

Most high school and college students are expected to dedicate time towards academic pursuits, while student-athletes have an additional focus for time dedication, which is on the sport that they play (Jolly, 2008). Similarly, while approaching college, most high school students may focus primarily on selecting an academic major that reflects personal interests. Student-athletes, however, must consider incorporating interests other than their sport into the decision-making process of selecting an academic major (Andrews, et al., 2017).

In examining key elements that help student-athletes succeed academically and in selecting a career, specific factors that influence student-athletes in selecting an academic major must be explored (Andrews, et al., 2017). As all students including student-athletes contribute to the future of their communities, it is important to help develop student-athletes at an early stage during high school for success in college. Such success includes selecting an academic major, as well as outlining key steps and strategies to pursue future career interests (Portnoy, 2012; Terrell, 2012). Helping student-athletes achieve the right skill set and providing resources and guidance early on in high school and college can prepare them to develop their talents and interests, and not simply focus on their sport (Terrell, 2012). Preparing student-athletes for college success involves selecting an academic major that reflects talents, skill sets, and future career interests (Andrews, et al., 2017). In helping student-athletes select the right academic major, understanding factors that have influenced the academic major selection of student-athletes is key. Educators who understand key factors that influence student-athlete academic major selection can ensure student-athletes are purposeful in selecting an academic major that will help them achieve their full potential (Henrion, 2009; Joiner, 2016).

Four dominant factors have been noted in research to significantly influence the academic major selected by student-athletes, which includes athletic coaches, student-athlete identity, academic advising, and career exploration (Amran, 2013; Andrews et al., 2017; Henrion, 2009; Kelly, 2009). The purpose of this study was to explore how each identified factor has influenced student-athlete academic major selection based on a collection of studies. The literature review was conducted by the researcher, and has been organized using the following sections: Student-Athletes, Academic Majors, Importance of Selecting an Academic Major or Degree, Athletic Coaches, Athletic Coach and Student-Athlete Academic Major Selection, Student-Athlete Identity, Student-Athlete Identity and Student-Athlete Academic Major Selection, Academic Advising, Academic Advising and Student-Athlete Academic Major Selection, Career Exploration, Career Exploration and Student-Athlete Academic Major Selection, and the Conceptual Framework.

Student-Athletes

Student-athletes are students that play a particular sport for an education institution. At the high school level, student-athletes strive to meet the demands of their academics and their sport (Ryska & Vestel, 2004). At the college level, student-athletes attend a particular college as a student who enrolls in a specific academic program that they plan to complete while balancing the role of being an athlete and a student. Moreover, student-athletes have to balance the roles and responsibilities of their academic program at the educational institution, as well as the demands of their sport (Van Dijk, 2015). Depending on the institution where the student-athlete is enrolled, he or she may need to maintain eligibility to continue playing their sport (Holden, Pugh, & Richards, 2016). Student-athletes need to achieve minimum grades to maintain eligibility toward competing in their sport at the educational institution that they attend. Student-

athletes may have also received a sports scholarship from that educational institution (Holden, Pugh, & Richards, 2016). Additionally, student-athletes have a unique opportunity to select an academic major that may align with their academic interests and career interests, while also pursuing their sport of interest at a competitive level (Buzzetta, Kennelly & Lenz, 2017).

While having the opportunity to pursue both academic and athletic goals, student-athletes may also experience varying levels of stress in that process (Pritchard & Wilson, 2005). Additionally, dedicating time toward sports often leads to student-athletes experiencing difficulties in addressing their responsibilities as a student (Grimit, 2014). Therefore, student-athletes may benefit from helpful coping strategies to manage and succeed in both their academics and their sport (Gaston-Gayles, 2003). Strategies include obtaining help from academic support services (Grimit, 2014) and receiving support and mentoring from their coach to help them succeed in both their sport and academics (Felce, 2018).

Academic Majors

An academic major is known as an academic field of study that students enrolled in colleges or universities pursue (Miner, 2016). Academic majors have been associated with achieving knowledge in various fields of study that may be directly related to specific career fields (CollegeBoard, *n.d.*). Some academic majors also lead to pathways for master's degree programs (CollegeBoard, *n.d.*). Additionally, academic majors have consisted of a collection of courses that are related to academic fields of study for specific academic majors (Miner, 2016). A collection of courses belonging to each academic major must be completed with the allocated passing grades for a student to complete the academic major and earn a degree. Moreover, a variety of academic majors exist at different colleges and universities. Academic majors reflect a

wide array of subjects including education, neuroscience, mathematics, data science, business administration, and international languages (Harvard University, *n.d.*).

Importance of Selecting an Academic Major or Degree

Selecting an academic major is important for a variety of reasons. According to Balsamo, Lauriola, and Saggino (2013), an academic major is considered a significant decision that should be carefully deliberated. Moreover, the selection of an academic major could have a profound impact on the desired career path a student pursues (University of California, Berkeley, *n.d.*; Porter & Umbach, 2006). Many students select a career path that is directly related to the academic major that they have pursued. Similarly, selecting an academic major could be considered highly consequential, as a major could provide the opportunity for students to become skilled and excel in various careers that are related to the academic major selected. In addition, selecting and pursuing an academic major could also lead to achieving a college degree, placing students at an advantage in terms of being qualified for higher earning positions within various career fields (Nantz, Nunn, Rotrosen, & Schanzenbach, 2017).

The importance of selecting an academic major extends to the process of selecting a major that benefits students to better understanding their own interests, strengths, and career passions. The choice of a particular major could be beneficial by instilling a higher level of motivation to achieve academic success (Harackiewicz, Priniski, & Smith, 2016; University of Toronto, *n.d.*).

It is important for students to select a major based on interest in a particular field of study and for students to dedicate time in selecting a major based on understanding what is involved towards achieving success in that particular major. Selection of a major needs to reflect self-exploration, personal interests, career interests, time commitments, and skill set to prevent lost

time or frustrations caused by changing an academic major selection (Carduner, Padak, & Reynolds, 2011; Gustavus Adolphus College, *n.d.*). As colleges highlight to students the importance of completing an academic major (Gustavus Adolphus College, *n.d.*; Northern Michigan University, *n.d.*; The University of Arizona, *n.d.*), these expectations also apply to student-athletes as they need to prioritize selecting and pursuing an academic major.

An additional element of importance in selecting an academic major for student-athletes is related to ensuring student-athletes have recognized that an academic major is about more than simply a means to being eligible to play college level sports (Lederman, 2003). Student-athletes must also consider their goals independent of their sport (Terrell, 2012), as well as the opportunity to complete a degree and graduate (Nora, Pascarella, Terenzini, & Truckenmiller, 1999).

Athletic Coaches

Athletic coaches have had the role and responsibility of winning games for a specific sport based on their expertise in the particular sport (Finley & Fountain, 2011; McGladrey, Pratt, Rima, & Weishaar, 2019). Coaches have also played an important role for athletes by coaching athletes in regard to sports performance (Appleby, Davis, Davis, Gustaffson, & Wetherell (2018). Athletic coaches not only coach athletes on sports skills, they also facilitate sports practice and provide direction on playing during games (McGladrey, Pratt, Rima, & Weishaar, 2019). Athletic coaches can also motivate and inspire student-athletes to succeed not only in their sport, but also in the academic setting (Christensen, Hagler, Erickson, Raposa, & Rhodes 2019). With the close relationships that some coaches build with athletes, coaches may also have the ability to impact an athlete's physical and psychological wellbeing through their coaching role and by setting expectations for athletes (Appleby, Davis, Davis, Gustaffson, & Wetherell

2018). Athletic coaches vary in terms of how they pursue their role as a coach, with some focusing on winning games as their sole purpose (Finley & Fountain, 2011). In contrast, some athletic coaches consider their role as a coach to also be a role model or a friend to athletes, while ensuring that student-athletes are mentored not only for sports performance, but for academic success and personal skill development. They may also support development of communication skills and confidence in athletes (Christensen et al., 2019).

Athletic Coach and Student-Athlete Academic Major Selection

As athletic coaches spend a significant amount of time with student-athletes, coaches should also monitor academic performance and encourage student-athletes to select a meaningful academic major that aligns with future careers interests (Banwell & Kerr, 2016). A study by Love (2018) which focused on student-athletes of both genders from a variety of sports, found that student-athletes expressed feelings of motivation from coaches who were supportive and placed high expectations regarding success both academically and in their sport. The study described the importance of coaches as well as athletic staff fostering a culture that allows for student-athletes to successfully balance their sport and their academics (Love, 2018). Similarly, the supportive influence of coaches towards student-athletes' academic success was noted in another study by Kuntz (2011), which mentioned the important role that coaches have regarding student-athlete academic development. Moreover, athletic coaches are noted as being highly influential in the decision-making process of student-athletes selecting an academic major. A research study by Kornspan, Kretovics, & Kulics (2015) found that within NCAA Division I educational institutions in the Midwest, 20% of football student-athletes expressed that their coach's perspectives were a dominant influence in selecting an academic major. Similar findings were noted in a study by Terrell (2012) that indicate a number of student-athletes view their

coach as role models and find their coach to be influential. Additionally, a study by Amran (2013) highlighted the fundamental role of athletic coaches in regard to positively influencing student-athletes in relation to decision-making, their level of academic success, while often playing the role of a parental figure. Amran (2013) further highlighted ways athletic coaches have expressed the importance of achieving a degree.

In contrast, some coaches may also have very different coaching strategies and styles that focus only on the importance of winning games and disregard other components such as a student-athlete's success off the field in relation to academics (Joiner, 2016). Similarly, a study by Calhoun (2012) found a commonality between all student-athletes in the study who mentioned their coaches' lack of involvement regarding their academics.

In understanding the differences found in coaching styles that have both positively supported student-athlete academic success and those who are non-supportive of student-athlete academic success, it is evident that the positive support of coaches in relation to encouraging student-athletes to excel academically and within their sport is an important source of motivation that shapes how student-athletes approach their title of both student and athlete (Amran, 2013).

Student-Athlete Identity

Activities in relation to a student's personal life during upbringing and high school contribute to his or her method of identifying himself or herself (Feltz et al., 2011). For student-athletes, their sport often becomes a dominant part of life, leading to the development of an athletic identity, with motivation and goal achievement highlighted by sports success (Feltz et al., 2011). In fact, any specific area of focus that becomes a significant time investment, such as a sport, could contribute to the identity of a student-athlete, and may also shape his or her life

choices, which may include whether student-athletes prioritize their sport or their academics (Henrion, 2009; Love, 2018; Mahoney, 2011).

Student-Athlete Identity and Student-Athlete Academic Major Selection

Aligning with a student-athlete's identity, the element of passion that a student-athlete holds in regard to his or her sport could further influence the decisions made in selecting an academic major (Henrion, 2009; Mahoney, 2011). The dominant influences of having a sport as a strong passion could impact the selection of an academic major. Additionally, the decision of selecting an academic major could be based on which colleges offer the best scholarship to play the specific sport or which academic major may be less demanding, thus ensuring greater eligibility to continue playing the specific sport (Moses & Rubin, 2017). The desire to remain eligible in turn could lead to a student-athlete not basing his or her decision on the inherent value of an academic major (Pellegrino & Saffici, 2012). In ensuring that student-athletes make knowledgeable decisions, the importance of student-athletes developing a positive mind frame in relation to prioritizing academics should be a strong focus of high school and college staff (Gaston-Gayles, 2004; Moser, 2016). Additionally, a positive mind frame in relation to academics could be incorporated into a student-athlete's identity through helping student-athletes acquire academic and learning focused skills, understanding the value of focusing on academic success, and understanding the importance of an academic major in regard to shaping potential future career opportunities (Gaston-Gayles, 2004; Terrell, 2012).

Similarly, the decision-making process of student-athletes selecting an academic major based on their identity being tied to a sport may also align with maintaining an identity in relation to factors such as self-esteem and confidence. The possibility of making life decisions that exclude the importance of their sport may lead to a negative impact on self-esteem (Cornell

2013; Wojciechowski, 2018). In fact, a research study by Wojciechowski (2018) indicated that athletes who no longer played their sport or incorporated their sport as a part of their daily life experienced low self-esteem. Moreover, the downfall of a decision to move away from their sport led to student-athletes not benefiting from an academic major that could have embraced and strengthened other skill sets and future career opportunities unrelated to their sport (Henderson, Jenkins-Guarnieri, Murdock, & Streat, 2014). How strongly a student-athlete has associated a sport with their identity could also impact future decisions about academic choices (Henderson et al., 2014). Therefore, it is possible that if a student-athlete were to have the opportunity to gain a skill set or knowledge of different interests during primary and secondary school, the identity of a student-athlete might be strongly associated with additional talents and interests independent of their sport (Andrews, et al., 2017; Mahoney, 2011). For example, incorporating an academic interest into future decisions in approaching college may lead to student-athletes finding their identity strongly associated with different academic and career interests independent of their sport. Additionally, awareness of academic and career interests may lead student-athletes to select an academic major more carefully (Andrews, et al., 2017).

Attitudes and the outlook towards the importance of selecting an academic major varies depending on the sport that a student-athlete plays (Goodson, 2015; Pauline, 2019). A research study by Goodson (2015) which examined the academic majors selected by football and basketball student-athletes at historically black colleges and universities (HBCUs) found a number of student-athletes prioritized their sports performance and remaining eligible to play by selecting academic majors that were less academically demanding. The study also highlighted potential reasons for academic major selection being related to classes not conflicting with their

sport responsibilities, as well as achieving a certain academic standing to be able to play their sport (Goodson, 2015).

In contrast, a research study examining NCAA Division I, II and III lacrosse players of both male and female teams found that the most influential factors for student-athletes selecting an academic major was the quality of academics in relation to career opportunities, academic program, and university reputation, as opposed to athletic factors (Pauline, 2010). Moreover, additional research studies should be examined to compare and highlight factors that influenced student-athletes to prioritize an academic major in relation to a career over their sport.

Academic Advising

Academic advisors have an important and diverse role in regard to advising students on various components of academic success, which may include selecting an academic major, selecting classes and schedules, and providing guidance on academic assistance to help students succeed in their academic programs (Smith & Vaughn, 2018). Academic advisors have different methods of advising, such as a transactional method, which is based on providing knowledge on topics that students generally may inquire upon, or integrative advising, in which advisors have provided guidance to help engage students in their academic experiences and in making academic decisions (Martin, 2017).

In providing specific advising practices catered to the population of student-athletes, an article by Jackson, Livingston, and Lyons (2015) titled, 'Exploring Advising Models for Effective Student Advisement', highlighted diverse advising models for the purpose of advising student-athletes. The article outlined four specific models, which included prescriptive, developmental, intrusive, and appreciative (Jackson et al., 2015), presented below. The latter three models encouraged a collaborative approach for student-advising, while the prescriptive

model did not take into account a student-athlete's perspective. More specifically, the prescriptive model outlines an advising approach that is authoritarian in style where the advisor takes control and dictates a student's academic career and does not allow for a student-athlete to collaboratively make decisions regarding their own academic career. The second model is the developmental model, which focuses on all components of a student's academic success, including the student-athlete's perspective, while incorporating a collaborative approach to helping student-athletes in regard to goal achievement. The third model is the intrusive model, which focuses on expressing concern towards the student-athlete regarding academic success and well-being, while also motivating the student-athlete through skill development, specific services, and programs that may motivate the student toward academic success. Finally, the fourth model is the appreciative advising model, in which the advisor focuses on the strengths of the student-athlete that could lead the student-athlete to achieve academic goals and personal goals. This particular model contains six stages, with the first stage being the 'disarm' stage, which focuses on the advisor developing a bond with the student-athlete, the 'discover' stage that highlights a student-athlete's strengths, the 'dream' stage that outlines a plan to achieve a student-athlete's dream, the 'design' stage that focuses on both the advisor and the student-athlete to collaboratively outline strategies and steps to achieve the outlined dream, the 'deliver' stage that focuses on the student-athlete putting the plan in motion by taking action towards achieving the plan, and the 'don't settle' stage, where high expectations are set for the student-athlete (Jackson et al., 2015). Both the 'discover' stage in identifying a student-athlete's strengths, and the 'dream' stage to outline a plan for achieving a dream, could help student-athletes in combination with self-discovery tools as outlined in the study by Andrews et al. (2017), which focuses on career development workshops for student-athletes to support better

selection of an academic major that is valuable because the selection is based on interest in the academic field and future career aspirations. Furthermore, the four advising models highlight the importance of advisors ensuring that they are positively impacting the academic careers of student-athletes, while also being careful not to follow advising processes that may have a negative impact on a student-athlete's academic career (Jackson et al., 2015). Future studies that explore the implementation and effects of each advising model in regard to student-athletes' academic success (Jackson et al., 2015), may provide a stronger understanding of which particular model for specific student-athlete groups may be most effective in helping student-athletes select an academic major that aligns with their talents independent of their sport.

Academic Advising and Student-Athlete Academic Major Selection

The importance of quality academic advising dedicated to understanding the challenges of student-athletes' decision making is discussed in a study by Monda et al., 2015. The study supports student-athletes obtaining valuable knowledge and tools in relation to academic success, as the findings of the study stated that Division I Football players who had a strong understanding of academic goals and the significance of academic success had a higher level of motivation in approaching and achieving academic goals (Monda et al., 2015). The findings of the study demonstrated the powerful impact that academic advising has on a student-athlete's outlook towards academic success. An academic advisor, therefore, may strongly influence the academic major selection of a student-athlete (Monda et al., 2015). Although the study by Monda et al. (2015) focused specifically on football players, the positive impact of academic advising towards helping student-athletes achieve academic success through motivation and valuable tools may also provide successful academic outcomes for student-athletes belonging to various sports.

In noting the positive impact of advisors, academic advising at the high school level should also be considered important. Even high schools that are dedicated to preparing students for college success may not provide adequate information in regard to making academic major selections or preparation in selecting a college (Byers, Mattern, Shaw, & Springall, 2011; Moser, 2016). As student-athletes are also students, student-athletes may also benefit from academic advising during high school that prepares students for college success (Byers et al., 2011; Moser, 2016). Additionally, as student-athletes may not be aware of different skills and career opportunities that are reflective of various interests due to the potential of their sport becoming the prime focus of a future career, academic advisors could provide strong leadership in guiding student-athletes towards achieving their full potential (Grandy, Lough, & Miller, 2016). A study by Grandy, Lough, & Miller (2016) found that academic advisors who utilized a strategy to advise at-risk student-athletes through having student-athletes take ownership and accountability for their academic progress, led to increases in their GPA. Additionally, student-athletes who have the opportunity to discuss future college careers in depth with a skilled academic advisor could be influenced in their academic major selection (Grandy, Lough, & Miller, 2016). Such skilled advising could contribute to the element of trust a student-athlete has towards an academic advisor, which could also influence their decision in selecting an academic major (Hinson, 2013; Parris, 2016).

In relation to academic advisors influencing student-athletes, academic advisors at the college level have the ability to positively impact student-athletes in terms of academic success. One research study found that academic advisors providing guidance and highlighting skill sets when assisting female student-athletes led to the female student-athletes achieving success in relation to academics (Comeaux, Snyder, Speer, & Taustine, 2014). Similarly, a research study

by Bell (2009) focusing on football student-athletes found academic advisors played a positive role in providing motivational support to achieve academically. Findings from Bell (2009) highlighted the importance of academic support, which may be a key ingredient in helping student-athletes pursue and balance an academic major that is demanding in addition to their sport (Gaston-Gayles, 2003). Findings of gender focused student-athlete advising studies indicated the importance of further researching the impact that academic advisors could have on both males and females (Bell, 2009; Comeaux et al., 2014), as well as comparing the outcome of student-athletes playing different sports.

Career Exploration

Career exploration has involved engaging in different activities that have helped an individual to explore career interests (University of California Berkeley, *n.d.*). The different activities relating to career exploration have included attending career workshops, participating in internships, completing career related assessments, and learning about how different skill sets align with specific careers (University of California Berkeley, *n.d.*). Certain workshops for career development, such as The Career Exploration and Planning Track (U.S. Department of Labor, *n.d.*) have also provided guidance in regard to achieving specific career goals through incorporating various components relating to career development, which has included information relating to specific career fields, as well as training and education requirements needed to succeed in specific career outcomes. Similarly, career exploration may assist in selecting academic majors that align with particular career interests (University of South Alabama, *n.d.*).

Career Exploration and Student-Athlete Academic Major Selection

Providing student-athletes with various career tools such as career counseling confers a strong advantage for student-athletes in utilizing a career-focused skill set in selecting an academic major (Bergman, Huml, & Hums, 2014). Similarly, career courses in high school that are mandatory similar to math or science courses in high school may also help student-athletes acquire various career interests before attending college.

Tools to assist students in selecting an academic major can include focusing on self-discovery, as students taking the time to learn more about their skills, talents, and interests through personality assessment tools such as the Myers-Briggs Type Indicator, can assist in the decision-making process of selecting an academic major (Kelly & Pulver, 2008). With student-athletes also falling under the umbrella of 'students', similar personality assessment tools may help student-athletes identify additional skills, talents, and interests independent of their sport (Kelly & Pulver, 2008). Additionally, combining tools such as personality assessments and identifying skills that can be beneficial in careers may assist student-athletes to learn more about themselves through discovering their personality and identity more closely, which in turn can also help them in the decision-making process of selecting an academic major (Andrews et al., 2017; Kelly & Pulver, 2008).

Moreover, upon identifying personal skill sets in relation to an academic major, student-athletes should also be provided with tools to select a college, such as exploring costs of tuition, success factors of a campus, ranking colleges based on interests after defining which elements are most significant, and the importance of meeting with an academic advisor throughout their college career to reevaluate and examine their decision regarding academic major selection (Portnoy, 2012). The higher the level of exposure, development, and knowledge provided to

student-athletes ahead of enrolling in college, the more likely student-athletes will understand the value and importance that should be placed on pursuing an academic major in addition to their sport (Henrion, 2009; Portnoy, 2012).

More importantly, student-athletes not engaging in activities to explore and gain experience in different fields of interest could face limited options in future career opportunities (Andrews, et al., 2017; Jia, Lorentson, LaBanca, Oh, Sibuma, & Snellback, 2015). Therefore, career exploration and understanding how different high school courses could develop skill sets that can be transferred into different careers may lead to more purposeful choosing of an academic major (Andrews et al., 2017; Jia et al., 2015). In fact, a research study published in 2015 from the Nellie Mae Foundation found that learning skills within a classroom that can also be applied to the real world positively impacted student success and interest in learning because students understood the usefulness of skills that were being taught (Jia et al., 2015). Similarly, a study by Andrews et al. (2017), which received support by the NCAA, outlined key developmental skills relating to career development specifically for student-athletes. Significant components to instill career development strengths and interests for student-athletes included self-discovery, career exploration, skill development in areas that focus on teamwork, leadership, problem-solving, creativity, motivation, as well as facilitation through leaders in the field of academics and athletics (Andrews et al., 2017). The results of the workshop based on a pilot study indicated positive outcomes for most student-athletes, which were highlighted as being valuable, inspiring, and beneficial (Andrews et al., 2017). Additionally, student-athletes also provided feedback regarding interest in future workshops that focus upon incorporating job and career information (Andrews et al., 2017). Moreover, the findings of the study indicated the

interest and potential for helping a number of student-athletes to be better prepared for future careers, and also identifying career interests outside of their sport (Andrews et al., 2017).

Similarly, a research study by Bantham, Beggs, Taylor, & Mahoney (2008) highlighted key factors that were rated as most dominant in influencing a student's selection of an academic major, which included personal interests. The study further indicated the importance of educating students about academic majors and career exploration (Bantham et al., 2008). The findings of the study can also be applied specifically to student-athletes, as their personal interest of pursuing their sport combined with lack of information on academic majors and future careers may contribute to selecting an academic major solely based on the opportunity to pursue competitive sports at a higher level (Bantham et al., 2008; Mahoney, 2011). Additionally, without the knowledge of different career opportunities in relation to different academic majors, student-athletes may have limited their future opportunities for success in addition to sports (Andrews et al., 2017).

Opportunities for a work placement program similar to an internship that incorporated different fields of study during high school could also help student-athletes in relation to investing time toward learning different skill sets (Ontario Provincial Government, 2015; Wimmer Schwarb, 2015). Moreover, learning different skill sets can lead to obtaining new career interests, which may contribute to influencing a student-athlete's academic major selection (Andrews, et al., 2017; Ontario Provincial Government, 2015).

The skill set of a student-athlete has also been crucial in influencing the selection of an academic major, as a student-athlete that has various skills may have identified different opportunities or careers to pursue in addition to or as an alternative to his or her sport (Burns et al., 2013). Skills in relation to various academic fields may include hobbies such as cooking in

relation to attending a culinary school, fashion in relation to fashion design, or entrepreneurship in relation to business, which can all present opportunities in diverse fields of study or careers (Burns et al., 2013).

Similarly, many factors relating to skill set development within specific high school courses can assist students in determining an academic major, which may include life skills, writing interests, and reading interests (Boone, Brocovich, Keshishian, & Pal, 2010). In fact, research from a study of Grade 12 students selecting an academic major stated that the most dominant factor in influencing academic major selection was based on the courses selected in their final year of high school (Boonen, Damme, De Fraine, Pinxten, Van Den Noortgate, & Vanlaar, 2014). The study by Boonen et al. (2014) also indicated the importance of course selection through the guidance of an academic advisor.

Conceptual Framework

The two dominant theories that provided a strong framework for this research study included Social Identity Theory, a theory developed by Henri Tajfel and John C. Turner in 1979 (Tajfel & Turner, 1986), and Cognitive Dissonance Theory, a theory developed by Leon Festinger in 1957 (Festinger, 1957). Social Identity Theory is a theory that focuses on how one's identity is made up of different social groups where one finds a sense of belonging, and the social group that one strongly identifies with can play a significant role toward decision-making. The theory further explains how finding a social group that an individual identifies with provides a source of confidence and high self-esteem (Tajfel & Turner, 1986). In connection to this research study, Social Identity Theory contributed significantly towards highlighting the role that a student-athlete's identity plays in regard to selecting an academic major, as a student-athlete that held a strong sense of identity and self-esteem to solely their sport may have made very

different academic major selections than a student-athlete that also strongly identified with additional interests independent of their sport (Tajfel & Turner, 1986). Additionally, Social Identity Theory effectively supported a key area of focus for each of the research questions in this study by highlighting the importance of incorporating a student-athlete's social identity within all factors that influenced student-athlete academic major selection (Moses & Rubin, 2017; Tajfel & Turner, 1986). More specifically, a student-athlete's social identity influences decision-making on major life decisions such as academic major selection and prioritizing academics (Ashley, Steele, & Rens, 2019). For example, a study by Ashley et al. (2019), found that student-athletes who associate their identity strongly with academics achieved a higher level of academic success combined with overall satisfaction in life. The findings of the study further highlighted how diverse interests that contributed to the social identity of a student-athlete lead to differences in decision-making when making major life choices involving their sport and academics, in comparison to a student-athlete that holds a stronger social identity tied to solely their sport (Ashley et al., 2019). Additionally, Tajfel and Turner's (1986) Social Identity Theory strongly relates to the research questions of this study, as the social identity of each student-athlete may significantly contribute to how each student-athlete ranked the factors that have influenced their academic major selection, as well as whether a student-athlete is more likely to select an academic major for the sole purpose of playing their sport.

Cognitive Dissonance Theory is also directly tied to the research questions of this study, as factors that influence the decision-making process of selecting an academic major for student-athletes from various demographics directly relate to conflicting experiences and perspectives that an individual may experience (Festinger, 1957). Cognitive Dissonance Theory highlights the state of conflicting perspectives an individual has towards values, opinions, or decision-making

(Festinger, 1957). The theory focuses on eliminating the state of dissonance by striving to find consistency in thinking (Festinger, 1957). In relation to this research study, Cognitive Dissonance Theory highlights the experiences that student-athletes encounter in regard to conflicting perspectives of decision-making when selecting their academic major (Festinger, 1957). One side of the conflict focuses on selecting a purposeful academic major based on future career interest, and the alternate side focuses on selecting an academic major for the sole purpose of succeeding in playing college level sports (Fisher et al., 2010). Cognitive Dissonance Theory strongly contributed to the research study by highlighting how student-athletes may approach the academic major selection process, as conflicting views of future priorities based on academics and their sport are important elements that may have heavily contributed to the decision-making process (Festinger, 1957; Fisher et al., 2010). Cognitive Dissonance Theory was also directly tied to the research questions of this study, as perspectives relating to the decision-making process for various student-athletes could be highlighted and understood in depth (Fisher et al., 2010; Festinger, 1957).

Conclusion

Student-athletes are known as students that play a particular sport for an educational institution, while focusing on goal achievement towards success in academics as a student and sports as an athlete (Ryska & Vestel, 2004). At the college level, student-athletes must also approach academic major selection in relation to their academic goals (Miner, 2016). As academic majors are based on various fields of study and often directly related to specific career fields (CollegeBoard, *n.d.*), the importance of selecting the right academic major is significant, as academic majors are strongly tied to achieving a skill set toward a desired career path (University of California, Berkeley, *n.d.*; Porter & Umbach, 2006). As selecting an academic

major and working toward a degree are fundamental components involved in pursuing future career interests, building on academic skills in relation to specific careers (CollegeBoard, *n.d.*), and understanding dominant factors that influence the academic major selection process are also important for student-athletes to understand in the decision-making process. The four dominant factors identified in regard to influencing the academic major selection of student-athletes included athletic coaches, student-athlete identity, academic advising, and career exploration (Amran, 2013; Andrews, et al., 2017; Henrion, 2009; Kelly, 2009). First, although athletic coaches have had the role and responsibility of winning games (Finley & Fountain, 2011; McGladrey, Pratt, Rima, & Weishaar, 2019), athletic coaches also motivate student-athletes academically (Love, 2018), as well as encourage student-athletes to select academic majors that are related to their career interests (Banwell & Kerr, 2016). Second, a student-athlete's identity strongly contributes toward how he or she identifies himself or herself (Feltz et al., 2011), and as a result, can influence his or her academic major decision based on whether he or she closely identifies with a sport (Terrell, 2012) or academic interests (Pauline, 2010). Third, academic advising staff can provide advisement to students in regard to multiple avenues relating to academic success (Smith & Vaughn, 2018). Yet academic advising also plays a strong role in the decision-making process for student-athletes in selecting an academic major based on diverse advising styles and models (Hinson, 2013; Jackson et al., 2015; Parris, 2016). Finally, career exploration involves a diverse array of career development components relating to helping individuals explore career interests (University of California, Berkeley, *n.d.*). As career exploration also encompasses various strategies to help student-athletes identify career interests such as personality assessments, career exploration also plays a fundamental role in helping student-athletes select an academic major (Kelly & Pulver, 2008). As each of the four identified

factors have been noted as influential in student-athlete academic major selection, exploring influential components of each factor was explored in this research study. The next chapter outlines the methodology components of this research study.

CHAPTER 3

Methodology

This study was a secondary research study, also known as a desk study (Largen & Morris, 2019), with a systematic review as the research design in combination with a qualitative data analysis (Creswell, 2016; The University of Edinburgh, *n.d.*). A secondary research study focuses on synthesizing, analyzing and summarizing a collection of primary research studies, and utilizing information from primary research studies as data (Kamins & Stewart, 1993; Largen & Morris, 2019). For the purposes of this secondary research study, this study explored a collection of studies in relation to how each identified factor has influenced student-athlete academic major selection, with the identified factors including athletic coaches, student-athlete identity, academic advising, and career exploration (Amran, 2013; Andrews, et al., 2017; Henrion, 2009; Kelly, 2009).

A secondary desk study was selected to examine the numerous research studies relating to how each of the identified factors influenced academic major selection. This method allowed for compacting quantities of data from relevant studies into information that successfully addressed each of the four research questions of this study (Kamins & Stewart, 1993). In further describing the systematic review and qualitative analysis, a systematic review is a research design that involves collecting relevant data to successfully answer the research questions of a study through ensuring that studies selected are valuable resources that significantly contribute towards responding to the study's research questions (Himmelfarb Health Sciences Library, *n.d.*; The University of Edinburgh, *n.d.*). A systematic review was selected as the research design for the purposes of focusing on detailed and plentiful information from multiple studies that are based on a variety of student-athlete participants. A systematic review was also selected for the

purpose of providing a rich analysis of various attributes relating to each identified factor that has influenced student-athlete academic major selection (Himmelfarb Health Sciences Library, *n.d.*; The University of Edinburgh, *n.d.*).

Additionally, in defining a qualitative data analysis, this type of analysis approaches data through categorizing detailed and descriptive data, as well as identifying patterns and themes (Creswell, 2016). For the purposes of this research study, the qualitative data analysis was an excellent approach for compartmentalizing influential attributes contributing to academic major selection through the process of identifying patterns and concepts that translated into themes within a collection of studies for each specific factor, as well as between all factors (Creswell, 2016). The qualitative analysis also involved coding as a method of grouping together trends and patterns of influence found within studies relating to each of the four factors (Amran, 2013; Andrews, et al., 2017; Henrion, 2009; Kelly, 2009; Creswell, 2016). To successfully code the data, a qualitative approach was utilized to highlight influences across each of the studies relating to each specific factor and between each of the four factors (Amran, 2013; Andrews, et al., 2017; Henrion, 2009; Kelly, 2009; Creswell, 2016). More specifically, patterns of influence were coded as themes associated with each factor and their relationships were explored.

Data Collection

As this study was a secondary research study, the data consisted of a collection of research studies that addressed each of the four research questions. First, to collect relevant data, various research studies that addressed the four research questions were sought (Kamins & Stewart, 1993; Largan & Morris, 2019). Diverse studies using different types of quantitative and qualitative data were included, for example, those using surveys, interviews, and questionnaires (Creswell, 2016). Additionally, all studies selected were based in the United States of America

(Largan & Morris, 2019). It is also important to note that when collecting data, if additional factors that influenced student-athlete academic major selection were found, or if important components relating to student-athletes were found, then these additional factors and components were also categorized as themes and discussed, as well as summarized as notable findings for this research study. Furthermore, the researcher sought to reach a saturation point, which is defined as reaching a point in data collection when no new data is found in relation to addressing research questions (Fusch & Ness, 2015; Nelson, 2016). It is also important to note it may be unreachable to explore all studies in existence that relate to addressing the four research questions (Largan & Morris, 2019). A saturation point is also a term that often has no definitive formula, as often a saturation point uniquely caters to individual research studies and varies accordingly (Fusch & Ness, 2015; Nelson, 2016). Therefore, for the purposes of this research study the saturation point was identified when data from a collection of studies with high relevance in addressing all four research questions provided common outcomes. The researcher identified the saturation point after 20 articles were reviewed. All research studies were selected based on data that was relevant and provided valuable information towards addressing the research questions (Kamins & Stewart, 1993; Largan & Morris, 2019). As noted in chapter one, the following research questions were addressed:

1. How do athletic coaches influence student-athlete academic major selection?
2. How does student-athlete identity influence student-athlete academic major selection?
3. How does academic advising influence student-athlete academic major selection?
4. How does career exploration influence student-athlete academic major selection?

Once all studies that were relevant and significant in responding to all research questions were selected, data from each research study selected were organized based on the title of the

study, specific sports identified, the gender of student-athletes in the study, and the findings of the particular study (Creswell, 2016).

Analysis

Qualitative analysis was utilized to analyze the data of this research study through coding the data, which involved highlighting relevant and important information related to the research questions, and making note of significant concepts and patterns found in the data, which were further organized based on the themes relating to specific influences on student athlete academic major selection. The steps that were taken to conduct the analysis were the following: first each study was selected in relation to answering each of the four research questions with particular focus on student-athlete gender, sport, and the relevant findings within each study. Next, significant information related to answering the research questions was highlighted, and specifically focused on the three sections of each study, which included participant information relating to gender, specific sports identified, and the findings (Creswell, 2016).

The coding process involved identifying themes from patterns and concepts within each study and describing the content in different colored fonts (Creswell, 2016). The patterns and concepts were based on describing influential attributes or components within each of the four factors that influenced student-athlete academic major selection (Amran, 2013; Andrews, et al., 2017; Henrion, 2009; Kelly, 2009). The coding process of the analysis was followed by revising coded information to ensure all content was relevant and valuable in regard to addressing the research questions (Creswell, 2016). To facilitate the coding process, a colored font was utilized for different patterns and concepts and for the emerging theme related to patterns and concepts to ensure an organized approach in identifying themes was outlined (Creswell, 2016).

Once all themes within collections of studies and between collections of studies associated with each of the factors had been identified, all themes identified were revised to ensure all data associated with specific themes were relevant (Creswell, 2016). After ensuring that all themes were relevant in regard to addressing each research question, a detailed written summary explained how themes were identified based on specific data collected, as well as how the analysis of themes in relation to patterns and concepts of influence toward student-athlete academic major selection were addressed by each of the four factors (Amran, 2013; Andrews, et al., 2017; Creswell, 2016; Henrion, 2009; Kelly, 2009; Largan & Morris, 2019).

Validity

Validity was addressed by ensuring that results were not generalized based on the relevant findings of a specific research study, but the collection of relevant findings pertaining to each of the four factors and student-athlete categories outlined (Amran, 2013; Andrews, et al., 2017; Henrion, 2009; Kelly, 2009; Creswell, 2016). Validity was further addressed by searching for relevant findings related to one of the four factors of athletic coaches, student-athlete identity, academic advising, and career exploration when selecting the 20 studies for data collection, and then conducting a cross analysis by searching all 20 studies selected for relevant findings related to the remaining three factors (Amran, 2013; Andrews, et al., 2017; Creswell, 2016; Henrion, 2009; Kelly, 2009; Largan & Morris, 2019).

Potential Limitations and Assumptions

The first limitation of the study was the number of available research studies published that related to each of the four factors influencing student-athlete academic major selection. Secondly, this study was limited to the responses provided by student-athletes in each of the research studies selected. Thirdly, the student-athlete sample size in each study did not represent

every student-athlete in college sports, as not every student-athlete that participated in college sports was a part of the sample in each selected study. Fourthly, the results of each selected study were limited to the student-athletes that chose to participate in the specific study.

Additional limitations included the methodology limitations of each study, as some studies were limited to solely a quantitative or qualitative study. Additionally, studies that utilized a survey as the selected instrument to collect data were limited to the preset survey response selections for most survey questions that were not open-ended, which may have led to student-athletes selecting a response that matched closest to their perspective (Creswell, 2015). Limitations also include that this study was a secondary research study, and therefore limited to data collected from the 20 studies selected. Additional limitations included that influential attributes found were based on student-athletes from various sports and may not have included all sports that exist for student-athletes.

Assumptions of this research study included that the results found from a collection of studies were reliable based on participants of each study accurately interpreting questions and responding accordingly. Assumptions also included that participants of each study honestly responded to questions involved in each of the individual research studies for the purposes of ensuring accuracy, and that the questions in each research study were valid and reliable (Creswell, 2015).

Researcher Bias

Researcher bias was mitigated by ensuring that the study was beneficial to all universities or colleges interested in discovering influential factors that influenced student-athlete academic major selection by focusing on student-athletes in general and not one specific gender, sport, or division of student-athletes. Secondly, the researcher's occupation is providing leadership

workshops and leadership coaching for students that belong to various high schools, sports clubs, and recreation clubs, as well as providing students with experiential learning opportunities within various industries, including entertainment, sports, and hospitality. Professional experience both led to recognizing the importance of this topic and has influenced researcher beliefs about this topic. To address this influence, researcher bias was minimized by ensuring that the study was not restricted to the researcher's knowledge of student-athlete interests by selecting numerous studies with various student-athlete participant groups. Utilizing a theoretical framework as a fundamental component regarding the foundation of this research study also contributed to reducing researcher bias (Grant & Osanloo, 2014). Additionally, selection bias in selecting studies with only specific sports was also avoided by selecting a variety of studies that focused on numerous sports (Noble & Smith, 2014).

Conclusion

This secondary research study addressed each of the four research questions through conducting a systematic review in combination with a qualitative data analysis focused upon exploring a collection of 20 studies in relation to how each factor has influenced student-athlete academic major selection (Creswell, 2016; Himmelfarb Health Sciences Library, *n.d.*; Kamins & Stewart, 1993; Largen & Morris, 2019). The dominant factors examined in this research study included athletic coaches, student-athlete identity, academic advising, and career exploration (Amran, 2013; Andrews et al., 2017; Henrion, 2009; Kelly, 2009). Through the analysis of data collection, this study discovered attributes that have influenced student-athlete academic major selection pertaining to each factor based on a collection of studies focused on each particular factor, as well as attributes that have influenced student-athlete academic major selection between each factor (Creswell, 2016). The next chapter will explore the findings of this study.

CHAPTER 4

Findings

This chapter presents the findings of this study, which addressed the purpose of exploring how factors influence student-athlete academic major selection. The factors included athletic coaches, student-athlete identity, academic advising, and career exploration (Amran, 2013; Andrews, et al., 2017; Henrion, 2009; Kelly, 2009). As noted in the methodology chapter, this study was a secondary research study with a systematic review as the research design in combination with a qualitative data analysis (Creswell, 2016; Largen & Morris, 2019; The University of Edinburgh, *n.d.*). The data collected for this study was based on the selection of 20 peer-reviewed studies. All studies were selected based on their valuable information in addressing the four research questions, as well as incorporating diversity in terms of gender and a variety of sports. As previously noted, the four research questions were:

1. How do athletic coaches influence student-athlete academic major selection?
2. How does student-athlete identity influence student-athlete academic major selection?
3. How does academic advising influence student-athlete academic major selection?
4. How does career exploration influence student-athlete academic major selection?

Data Collection

Twenty peer-reviewed studies were selected for data collection and analysis. The list of studies selected are located in Appendix A. Based on data collection relating to each of the four factors (Amran, 2013; Andrews, et al., 2017; Henrion, 2009; Kelly, 2009), patterns and concepts were identified from the data collection, and led to a number of emerging themes as noted in Figure 1 below.

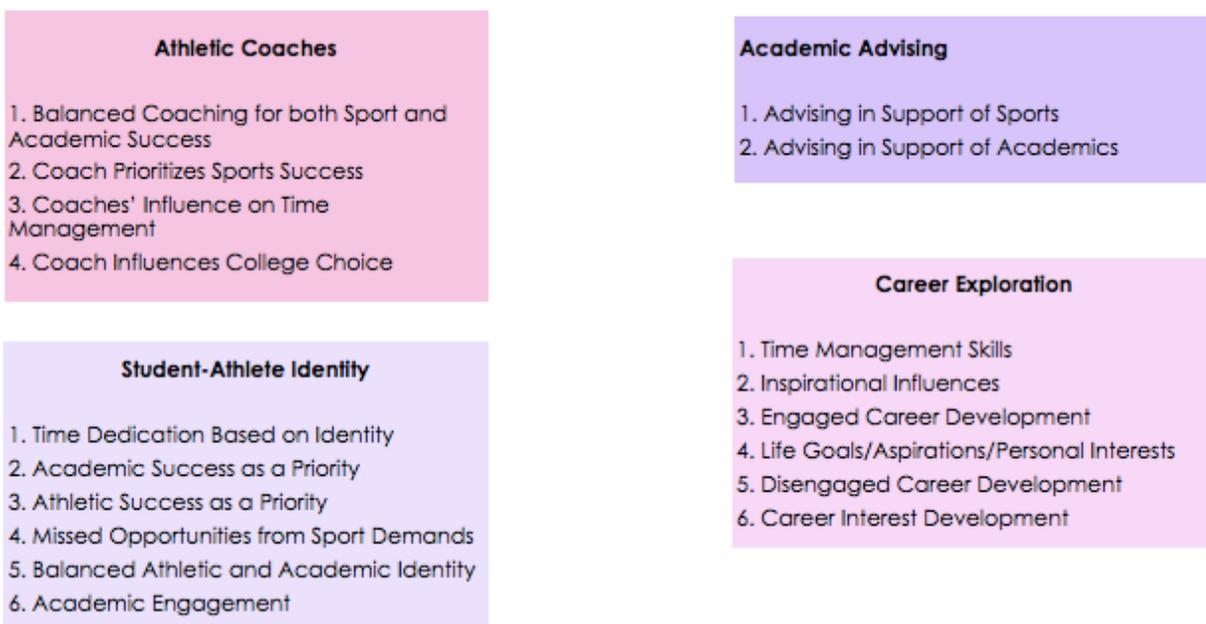


Figure 1. Themes in Relation to the Four Factors

Coded terms were also a key component to the themes found for each factor. The following table outlines the themes in relation to the factors for this study, as well as the coded terms in relation to each theme.

Table 1: *Factors, Themes in Relation to Factors, and Coded Terms*

Factors	Themes in Relation to Factors	Coded Terms
Athletic Coach	Balanced Coaching for both Sport and Academic Success	a) Academic support and care b) Academic success c) Excelling in sports and classes d) Valuable support
	Coach Prioritizes Sports Success	a) Success in sports b) Athletic capabilities recruitment c) Sports priority d) Laborious athletic schedules
	Coaches' Influence on Time Management	a) Coaching style b) Dominating time c) Low academic performance

		<ul style="list-style-type: none"> d) Low academic achievement e) Unsupportive academically f) Difficulty balancing time g) Sport and academic disbalance
	Coach Influences College Choice	<ul style="list-style-type: none"> a) Style of coaching b) Coach c) College selection
Student-Athlete Identity	Time Dedication Based on Identity	<ul style="list-style-type: none"> a) High time demands b) Dominant sports schedule c) Compromising academics d) Misaligned major and career goals e) Prioritizing athletics
	Academic Success as a Priority	<ul style="list-style-type: none"> a) Academics first b) Diversity in academic major options c) Importance of degree programs offered d) Reputability of academic department associated with major e) Degree achievement priority.
	Athletic Success as a Priority	<ul style="list-style-type: none"> a) Academic major priority b) Degree programs priority c) Academic department reputability d) Academic learning transferred to career e) Sport success f) Overemphasized athletic identity g) Less rigorous majors h) Support athletic careers
	Missed Opportunities from Sport Demands	<ul style="list-style-type: none"> a) Sport demands priority b) Not selecting major of choice c) Missed academic major opportunities d) Missed career development opportunities e) Missed course selection opportunities
	Balanced Athletic and Academic Identity	<ul style="list-style-type: none"> a. Academic success decisions b. Sport success decisions
	Academic Engagement	<ul style="list-style-type: none"> a) Academic applications b) Learning transfer to career fields
Academic Advising	Advising in Support of Sports	<ul style="list-style-type: none"> a) Eligibility focused major selected b) Discouraged pursuit of personal interest majors c) Major supports athletic participation

	Advising in Support of Academics	a) Beneficial post-graduation major selected
Career Exploration	Time Management Skills	a) Difficulties balancing sport and academic demands b) Time influenced academic major selection c) Time influenced career selections
	Inspirational Influences	a) Parent advice b) Parent and family vocations c) Mentors d) Peer mentor
	Engaged Career Development	a) Career exploration b) Career selection c) Career development courses d) Networking e) Career fairs
	Life Goals/Aspirations/Personal Interests	a) Student-athlete goals b) Career interests
	Disengaged Career Development	a) Lack of career interest focus b) Major selection unrelated to career ambitions
	Career Interest Development	a) Life experiences b) Career interest options c) Related career fields

Data Collected and Analysis of Findings

Factor #1: Athletic Coaches

For the first factor of athletic coach influences on academic major selection, a total of two studies made reference to athletic coaches' influencing academic major selection. Studies included both genders and a wide variety of sports, such as men's football, basketball, track and

field, swimming, tennis, wrestling, and women's golf, tennis, rowing, swimming, cross country, track and field, softball, soccer, volleyball (Malvaso & Navarro, 2016; Navarro; 2014). Specific details as to how coaches' influenced student-athlete academic major selection were not mentioned. As a result, no themes emerged specific to coaches directly influencing academic major selection (Malvaso & Navarro, 2016; Navarro, 2014).

Nonetheless, details as to how coaches indirectly influenced student-athlete academic major selection were found in a total of six studies, with indirect influences including degree selection, academic schedules, value of academic success, eligibility, and college selection. The collection of studies addressed both genders and a wide variety of sports, which included men's baseball, basketball, football, golf, ice hockey, lacrosse, soccer, swimming, tennis, wrestling track (indoor and outdoor), track and field, wrestling, and women's basketball, field hockey, golf, gymnastics, ice hockey, lacrosse, softball, soccer, swimming, tennis, track (indoor or outdoor), track and field, and volleyball. One of the six studies did not specify gender in relation to sports teams, but included the following sports: cross country, football, rowing, soccer, swimming and diving, and track and field. Another study generalized findings but listed most representative sports as including men's football, basketball, cross country, and swimming and diving, and women's basketball, cross country/track, and water polo (Cooper et al., 2013; Hardin & Pate, 2013; Heinze, Lu, & Soderstrom, 2018; Jeske, Kress, & Vogel; 2019; Letawsky, Palmer, Pederson, & Schneider (2003); Ridpath, Kiger, Mak, Eagle, & Letter, 2007). The identified themes in relation to the factor of athletic coaches' influence on the academic major selection of student-athletes were: Balanced Coaching for both Sport and Academic Success, Coach Prioritizes Sports Success, Coaches' Influence on Time Management, and Coach Influences College Choice.

Balanced Coaching for both Sport and Academic Success. The first theme, Balanced Coaching for both Sport and Academic Success, emerged from findings that included a number of student-athletes mentioning that their coaches placed importance on excelling in sports and classes, as well as many student-athletes emphasizing the value that they had placed on their coach's support, their coach expressing care towards their academics, and their coach being noted as a person that has had the most significant influence in regard to their academics (Kiger, et al., 2007). These findings described the role of athletic coaches supporting student-athletes through expressing support for both academics and athletics. Additionally, the coded terms in relation to Balanced Coaching for both Sport and Academic Success included academic support and care, academic success, excelling in sports and classes, and valuable support.

Coach Prioritizes Sports Success. The second theme, Coach Prioritizes Sports Success, surfaced from highlights within studies that included coaches placing a high value on success in sports for student-athletes. Findings that led to this theme included coaches focusing on recruiting student-athletes based on athletic capabilities and not placing value on academic qualifications (Jeske et al., 2019). This particular finding highlighted recruitment being solely based on the 'athlete' component and not the 'student' component when recruiting student-athletes (Jeske et al., 2019). Some student-athletes also mentioned that their coach's demands toward sports participation led to their exclusion from activities such as class review sessions, taking specific classes, and selecting specific academic majors, which led to students compromising various academic interests as a result of prioritizing sports (Heinze et al., 2018). Similarly, certain student-athletes mentioned that the majority of tasks in their laborious daily schedules were outlined by their coach (Hardin & Pate, 2013). Certain student-athletes also mentioned feeling stressed by trying to meet their coach's sport expectations, while staying

eligible to play their sport through adhering to the demands of their schedules and academic major (Hardin & Pate, 2013). This particular finding also highlighted academic schedules taking a backseat to athletic schedules and coaching expectations (Hardin & Pate, 2013). The coded terms in relation to Coach Prioritizes Sports Success included success in sports, athletic capabilities recruitment, sports priority, and laborious athletic schedules.

Coaches' Influence on Time Management. The third theme, Coaches' Influence on Time Management emanated from how coaching styles dominated time and schedules toward sports for student-athletes, and thus, led to student concerns about time management in balancing academic and sport demands. Highlights from findings included some student-athletes commenting on their coach's demands being related to low academic performance, with one student-athlete mentioning that his coach did not comprehend the necessity of study time (Heinze et al., 2018). Similarly, another student-athlete mentioned that his coach did not express the need for high academic achievement, stating that degrees can be achieved with grades in the 'C' range, and that an additional available hour in a student-athlete's schedule should be dedicated to sleep to enhance sports performance as opposed to dedicating the additional hour to studying (Heinze et al., 2018). Similarly, a number of student-athletes mentioned difficulties in balancing their time to succeed academically, staying eligible to play their sport, as well as catering to the sport's demands set by their coach (Hardin & Pate, 2013). The findings from this particular theme exemplified the impact that coaching styles have toward limiting time for academic pursuits such as studying, valuing time dedication toward sports instead of academics, and difficulties of balancing time toward both sports and academics. All these components relate to the element of time management for student-athletes (Hardin & Pate, 2013; Heinze et al., 2018). Additionally, coded terms in relation to themes Coaches' Influence on Time Management

included coaching style, dominating time, low academic performance, low academic achievement, unsupportive academically, difficulty balancing time, and sport and academic disbalance.

Coach Influence on College Choice. The fourth theme, Coach Influences College Choice, surfaced in descriptions of how coaches had a significant influence on the college a student-athlete selected, as a number of student-athletes specified that their college selection had been motivated by the coaches themselves for their sport (Barnes, Carroll, & Rhee, 2018). Similarly, a student-athlete mentioned that his coach was a fundamental deciding factor toward his college selection decision (Cooper et al., 2013). Moreover, many student-athletes stated that the head coach was one of the most important elements that influenced their college choice (Letawsky et al., 2003). The findings of coaches significantly influencing college selection decisions for a number of student-athletes highlighted the value that several student-athletes placed on coaches when selecting a college (Barnes, Carroll, & Rhee, 2018; Cooper et al., 2013; Letawsky et al., 2003). Coded terms in relation to Coach Influence on College Choice included style of coaching, college selection, and coach.

Summary of Athletic Coach Influences

Various influences on how athletic coaches have indirectly influenced student-athlete academic major selection were found and described in four themes. The themes included, Balanced Coaching for both Sport and Academic Success, Coach Prioritizes Sports Success, Coaches' Influence on Time Management, and Coach Influences College Choice (Cooper et al., 2013; Hardin & Pate, 2013; Heinze et al., 2018; Jeske et al., 2019; Letawsky et al., 2003; Ridpath et al., 2007).

Factor # 2: Student-Athlete Identity

For the second factor, student-athlete identity, themes in relation to student-athlete identity influencing student-athlete academic major selection surfaced in eight studies. The collection of studies focused on both genders, and included men's baseball, golf, soccer, tennis, and women's golf, soccer, tennis, swimming and diving, softball, basketball, track and field, golf, soccer, rowing, and volleyball, with special note of three studies that generalized sports with sports not specified, and one study that generalized sports with sports not specified but listed most representative sports as including men's football, basketball, cross country, and swimming/diving, and women's basketball, cross country/track, and water polo (Barnes, Carroll, Kim, & Rhee, 2018; Barnhill & Czekanski, 2016; Cooper, Gawrysiak, & Hawkins, 2013; Foster & Huml, 2017; Heinze, Di Lu, & Soderstrom, 2018; Letawsky, Palmer, Pederson, & Schneider, 2003; Miller, Nadler, & Pelum, 2017; O'Hanlon & Potuto, 2007; Simons & Van Rheenen, 2014). The identified themes in relation to how student-athlete identity had influenced the academic major selection of student-athletes were Time Dedication Based on Identity, Athletic Success as a Priority, Academic Success as a Priority, and Missed Opportunities from Sport Demands.

Time Dedication Based on Identity. The theme Time Dedication Based on Identity emerged from information that highlighted the high time demands of a sports schedule compromising academic decisions for student-athletes, with outcomes including several student-athletes having a higher likelihood of not selecting a major aligning with long term career goals, but instead prioritizing their athletics when choosing a major due to limited time from arduous sports schedules (Foster & Huml, 2017). Consequently, the struggle of balancing time toward

sports and academics was also noted, as a number of student-athletes experienced selecting academic majors based on prioritizing their sport and not selecting their first choice for academic majors if the major was considered demanding (O’Hanlon, & Potutu, 2007). Moreover, several student-athletes made time commitment decisions based on demanding sports schedules and not in pursuit of a demanding academic major (O’Hanlon, & Potutu, 2007). Therefore, the demands of time dedication toward sports not only impacted academic major selection, but also academics and career pursuits (Foster & Huml, 2017; O’Hanlon, & Potutu, 2007). Additionally, the coded terms in relation to Time Dedication Based on Identity included high time demands, dominant sports schedule, compromising academics, misaligned major and career goals, and prioritizing athletics.

Athletic Success as a Priority. The theme Athletic Success as a Priority was identified based on findings relating to a number of student-athletes making decisions to ensure sports success, while not placing the same value on academic success. For example, several student-athletes were found to overemphasize their athletic identity through selecting majors considered to be easier and less rigorous to support and focus on their athletic careers (Foster & Huml, 2017). Therefore, as a result of overemphasizing athletic identity and pursuing majors considered to be easier, many student-athletes limited their opportunities and options for academic major selection (Foster & Huml, 2017). A number of student-athletes also approached academics solely for the purposes of ensuring eligibility was maintained to play their sport (Simons & Van Rheenen, 2014), which further highlighted the importance student-athletes had primarily placed on eligibility when making academic decisions. Furthermore, several student-athletes also ranked coaches, athletic facilities, playing chances, and their team in their top ten considerations when selecting a college, but did not mention academic majors as a consideration (Barnhill &

Czekanski, 2016). Likewise, many student-athletes mentioned that the reason for attending college was to play sports, while not mentioning an academic program or major as the reason (Miller et al., 2017). Therefore, a number of student-athletes primarily considered sports-related components when selecting a college (Barnhill & Czekanski, 2016). Additionally, coded terms in relation to Athletic Success as a Priority included academic major priority, degree programs priority, academic department reputability, academic learning transferred to career, sport success, overemphasized athletic identity, less rigorous majors, and support athletic careers.

Academic Success as a Priority. The theme Academic Success as a Priority emerged from some student-athletes placing value on their academics first when considering academic major selection, with one student-athlete mentioning selecting a university due to the wide variety of academic majors offered (Cooper et al., 2013). Similarly, some student-athletes mentioned that specific degree programs offered at a university were most important when selecting a university (Letawsky et al., 2003), which highlighted how academics were a significant component in the decision to pursue a university. Additionally, when selecting a college, some student-athletes considered the reputability of the academic department associated with their academic major selection (Barnhill & Czekanski, 2016), which strengthens the importance that some student-athletes placed on academic success in relation to an academic department's reputation when pursuing a major at a particular college. In addition, one student-athlete had mentioned that her first priority was to achieve a degree, while another student-athlete mentioned that academics were an important consideration when choosing a university (Barnes et al., 2018). Therefore, the findings for this particular theme highlighted the importance of academic major, academic success, and degree achievement for some student-athletes when making college selection decisions (Barnes et al., 2018; Barnhill & Czekanski, 2016; Cooper et

al., 2013; Letawsky et al., 2003). Coded terms in relation to Academic Success as a Priority included academics first, diversity in academic major options, importance of degree programs offered, reputability of academic department associated with major, and degree achievement priority.

Missed Opportunities from Sport Demands. The theme Missed Opportunities from Sport Demands surfaced from a number of student-athletes experiencing conflict in relation to their identity, with sports demands from their coach leading to missing the opportunity to take specific academic majors, being discouraged from taking specific academic majors, along with missed opportunities in terms of career development and course selection (Heinze, 2018). Therefore, in pursuit of sport demands, many student-athletes had compromised opportunities in relation to their academics, such as academic major selection options and additional career development pursuits independent of their sports career (Heinze, 2018). Additionally, coded terms in relation to Missed Opportunities from Sport Demands included sport demands priority, not selecting major of choice, missed academic major opportunities, missed career development opportunities, and missed course selection opportunities.

Additional Themes in Relation to Student-Athlete Identity. Two additional themes emerged in relation to student-athlete identity indirectly influencing academic major selection. From a study by Gilson & Paule (2011), which focused on both male and female student-athletes, with sports including men's golf, soccer, tennis, and women's golf, soccer, tennis, swimming and diving, track and field, golf, and volleyball, the first theme Balanced Athletic and Academic Identity came forth from findings. Balanced identity was demonstrated by a number of student-athletes making decisions that expressed academic success and sports success. For example, many student-athletes mentioned that the advisement of their teammates toward

achieving success in a difficult academic major, as well as academic support from their teammates was beneficial toward pursuing both their sport and academics (Gilson & Paule, 2011). This particular finding supports the expressed interest various student-athletes demonstrated toward succeeding in both their sports and academics in relation to their identity as a student and an athlete (Gilson & Paule, 2011). Coded terms in relation to Balanced Athletic and Academic Identity included academic success decisions and sport success decisions.

The second theme, Academic Engagement, surfaced in relation to various student-athletes engaging in academics through taking learning from their classes and integrating those learnings into career fields of interest. This particular finding demonstrated how academic engagement was beneficial toward the career pursuits of certain student-athletes (Gilson & Paule, 2011). Coded terms in relation to Academic Engagement included academic applications and learning transfer to career fields.

Summary of Student-Athlete Identity

Various influences on how student-athlete identity directly influenced student-athlete academic major selection were found and described in five themes. The themes included, Time Dedication Based on Identity, Athletic Success as a Priority, Academic Success as a Priority, and Missed Opportunities from Sport Demands. (Barnes et al., 2018; Barnhill & Czekanski, 2016; Cooper et al., 2013; Foster & Huml, 2017; Heinze et al., 2018; Letawsky et al., 2003; Miller et al., 2017; O'Hanlon & Potuto, 2007; Simons & Van Rhee, 2014). Additionally, influences based on how student-athlete identity indirectly influenced student-athlete academic major were also found and described in two themes, which included Balanced Athletic and Academic Identity, and Academic Engagement.

Factor #3: Academic Advising

For the third factor, academic advising, themes in relation to academic advising influencing student-athlete academic major selection surfaced in a total of three studies. The collection of studies included both genders and a wide variety of sports, which consisted of men's football, basketball, track and field, swimming, wrestling, rowing, tennis, and women's volleyball, soccer, softball, track and field, cross country, swimming, rowing, tennis, and golf, as well as seven men's sports and six women's sports generalized and not specified (Ayers, Dobose, & Pazmino-Celvallos, 2012; Malvaso & Navarro, 2016; Navarro; 2015). The identified themes in relation to how academic advisors had influenced the academic major selection of student-athletes were Advising in Support of Sports and Advising in Support of Academics.

Advising in Support of Sports. The theme Advising in Support of Sports arose from data collection that highlighted academic advisors influencing student-athletes toward selecting majors in favor of being eligible to play their sport. Supportive findings included a number of student-athletes mentioning that advisors encouraged them to make academic major selections for the purposes of maintaining eligibility and not in pursuit of personal interests (Navarro, 2015). This particular finding highlighted advising styles that supported sports for the 'athlete' component of student-athletes and not the 'student' component of student-athletes (Navarro, 2015). Similarly, selecting an academic major was often based on the encouragement of maintaining eligibility by academic advisors (Malvaso & Navarro, 2016). Many student-athletes were advised to select academic majors that did not interfere with or compromise their athletic participation (Ayers et al., 2012). Therefore, the findings for the theme Advising in Support of Sports demonstrated an advising style in support of student-athletes being able to play sports in

college, as opposed to encouraging academic major selection based on academic or career success (Malvaso & Navarro, 2016; Navarro, 2015). Coded terms in relation to Advising in Support of Sports included eligibility-focused major selected, discouraged pursuit of personal interest majors, and major supports athletic participation.

Advising in Support of Academics. The theme Advising in Support of Academics surfaced from findings that highlighted advisors guiding student-athletes towards academic success. The findings in support of this theme included various student-athletes expressing that advisors were a strong resource in selecting academic majors that aligned with career interests (Navarro, 2015). This particular finding highlighted the supportive advising style toward academics for student-athletes by incorporating career interests when assisting student-athletes in academic major selection (Navarro, 2015). Additionally, one student-athlete specified that his advisor helped him select an academic major that would be beneficial after graduating (Navarro, 2015). Overall, this particular theme expressed how advising styles can influence student-athletes not only toward academic major selection in support of academics, but also in support of career interests and being beneficial after graduation. The coded terms in relation to Advising in Support of Academics included beneficial post-graduation major selected.

Summary of Academic Advising

How academic advisors influenced student-athlete academic major selection were found in two themes. The themes included, Advising in Support of Sports and Advising in Support of Academics (Ayers, Dobose, & Pazmino-Celvallos, 2012; Malvaso & Navarro, 2016; Navarro; 2015).

Factor #4: Career Exploration

Themes in relation to the fourth factor, career exploration influencing student-athlete academic major selection, surfaced in a total of five studies. The collection of studies included both genders and a wide variety of sports, such as men's baseball, football, tennis, rowing, basketball, and track and field, swimming, wrestling, rowing, and women's softball, golf, tennis, basketball, rowing, cross country, track and field, and volleyball, soccer, softball, cross country, swimming, and rowing, and a study with sports generalized and not specified (Malvaso & Navarro, 2016, Navarro, 2014, Navarro, 2015, Navarro, 2015, Paule-Koba, 2019). The identified themes in relation to how career exploration had influenced the academic major selection of student-athletes were Engaged in Career Development, Disengaged Career Development, Inspirational Influences, Time Management Skills, and Life Goals/Aspirations/Personal Interests.

Engaged in Career Development. The theme Engaged in Career Development emerged from findings that highlighted student-athletes selecting academic majors based on engaging in activities related to career development. Notable findings included a number of student-athletes mentioning career exploration and career selection as fundamental components contributing to their academic major choice, with career exploration activities including career development courses, networking opportunities, and career fairs (Navarro, 2014). Similarly, career development in relation to connecting with professionals who work in the career fields that various student-athletes were interested in, as well as campus-wide resources were also considered important influences in selecting an academic major (Navarro, 2015). Moreover, many student-athletes mentioned that career assessments contributed toward strengthening personal interests as well as providing direction for academic major selections (Navarro, 2015).

Overall, the findings for this particular theme expressed student-athlete engagement toward career development as significantly contributing towards academic major selection (Navarro, 2014; Navarro, 2015; Navarro; 2015). Coded terms in relation to Engaged in Career Development included career exploration, career selection, career development courses, networking, and career fairs.

Disengaged Career Development. The theme, Disengaged Career Development, surfaced from findings that highlighted various student-athletes making academic major selections without any career development tools or exposure. Findings in support of this theme included a few student-athlete perspectives toward academic major selection being based on achieving a credential as opposed to being reflective of career interests (Navarro, 2015). Moreover, some student-athletes were found to select academic majors that were not related to their career ambitions, therefore, resulting in a disconnect between the academic major selected and career interests (Paule-Koba, 2019). Additionally, the coded terms in relation to Disengaged Career Development included lack of career interest focus, major selection unrelated to career ambitions.

Inspirational Influences. The theme Inspirational Influences surfaced from data collection relating to various student-athletes selecting academic majors based on inspirational career influences, with the advice of parents being noted as an important factor that contributed to developed interests in career fields (Malvaso & Navarro, 2016). A number of student-athletes also considered the vocations of parents, family, and mentors as influences in their academic major selection, with one particular student-athlete mentioning that a former NFL player shared the awareness of short careers in football (Navarro, 2014). Moreover, many student-athletes mentioned peer mentors as influential in selecting academic majors, although the academic

majors that peer mentors had encouraged were unrelated to the career interests of the student-athletes (Navarro, 2015). Overall, the findings for the theme Inspirational Influences highlighted different forms of inspiration that were important influences toward academic major selection and career pursuits (Malvaso & Navarro, 2016; Navarro, 2014; Navarro, 2015). Coded terms in relation to Inspirational Influences included parent advice, parent and family vocations, mentors, and peer mentors.

Time Management Skills. The theme Time Management Skills unfolded based on data collection that highlighted how the component of time affected career development opportunities and academic major selection for several student-athletes. Key findings included how difficulties in balancing sports and academics impacted the student-athlete academic major selection for a number of student-athletes, as various student-athletes indicated that the element of time influenced their academic major selection and career selection (Navarro, 2014). This particular finding highlighted how time management skills impacted academic major selections and career selections, as well as the ability to balance both sport and academic demands (Navarro, 2014). Additionally, coded terms in relation to Time Management Skills included difficulties balancing sport and academic demands, time influenced academic major selection, and time influenced career selections.

Life Goals/Aspirations/Personal Interests. The theme Life Goals/Aspirations/Personal Interests surfaced from findings that identified student-athlete goals, aspirations, and interests in relation to career exploration, which contributed to their academic major selection. Findings included many student-athletes mentioning that their internal passions were influential towards academic major and career selection decisions (Navarro, 2014). Coded terms in relation to Life Goals/Aspirations/Personal Interests included student-athlete goals and career interests.

Additional Theme in Relation to Career Exploration. An additional theme emerged in relation to career exploration indirectly influencing student-athletes academic major selection in two studies. Brown, Gordan, & Siben (2019) included both genders and listed sports without gender, and included the sports of baseball, basketball, cheer and dance, cross country, field hockey, football, golf, soccer, tennis, indoor track and field, outdoor track and field, and volleyball. Mavalso & Navarro (2016) focused on both male and female student-athletes, with men's sports including football, basketball, track and field, swimming, wrestling, rowing, tennis, and women's sports including volleyball, soccer, softball, track and field, cross country, swimming, rowing, tennis, and golf. The theme Career Interest Development surfaced from findings that included several student-athletes mentioning how life experiences prior to attending college were significant towards developing career ambitions (Malvaso & Navarro, 2016). In exploring career interests further, a number of student-athletes who had expressed interests in careers leading to coaching were found to have an interest in coaching related fields such as education-based careers (Brown et al., 2019). Therefore, life experiences of student-athletes as well as exploring related career interest fields were important components that contributed to the development of career interests for student-athletes (Brown et al., 2019; Malvaso & Navarro, 2016). Additionally, coded terms in relation to Career Interest Development included student-athlete goals and career interests.

Summary of Career Exploration

Influences on how career exploration has influenced student-athlete academic major selection were found and described in five themes. The themes included, Time Management Skills, Inspirational Influences, Engaged Career Development, Life Goals/Aspirations/Personal Interests, and Disengaged Career Development. Additionally, an influence regarding how career

exploration had indirectly influenced student-athlete academic major selection was found in the theme, Career Interest Development.

Common Themes Influencing Student-Athlete Academic Major Selection

In further analyzing all themes in relation to each of the four factors (Amran, 2013; Andrews, et al., 2017; Henrion, 2009; Kelly, 2009) three common themes between more than one of the factors influencing student-athlete academic major selection were noted. The common themes included Athletic Success, Academic Success, and Time Management. Figure 2 outlines the themes found in common between the themes of the factors influencing student-athlete academic major selection. As noted, the factors influencing student-athlete academic major selection were athletic coaches, student-athlete identity, academic advising, and career exploration (Amran, 2013; Andrews, et al., 2017; Henrion, 2009; Kelly, 2009).



Figure 2. Themes in Common Between Factors

In exploring the common themes between the four factors (Amran, 2013; Andrews, et al., 2017; Henrion, 2009; Kelly, 2009), the first common theme, Athletic Success, included three of the four factors influencing student-athlete academic major selection, which were student-athlete identity, athletic coaches, and academic advising. The specific themes that relate to the common theme of Athletic Success were Athletic Success as a Priority, which was from the influential factor student-athlete identity, the theme, Coach Prioritizes Sports Success, which stemmed from the influential factor of athletic coaches, and the theme, Advising in Support of Sports, which was from the influential factor of academic advising. The factor of career exploration did not share the common theme Athletic Success.

The second common theme, Academic Success, included two of the four factors influencing student-athlete academic major selection, which were student-athlete identity, and academic advising. The specific themes that related to the common theme of Academic Success were Academic Success as a Priority from the influential factor student-athlete identity, and the theme, Advising in Support of Academics, from the influential factor of academic advising. The factors of athletic coaches and career exploration did not share the common theme of Academic Success.

Additionally, the third common theme Time Management included three of the four factors influencing student-athlete academic major selection, which were student-athlete identity, athletic coaches, and career exploration. The specific themes that related to the common theme of Time Management were, Time Dedication Based on Identity from the influential factor of student-athlete identity, the theme of Coaches' Influence on Time Management from the influential factor of athletic coaches, and the theme of Time Management Skills from the influential factor of career exploration. The factor of academic advising did not share this theme.

Conclusion

Data collection and findings were established in this chapter. Through identifying and analyzing concepts and patterns, a number of themes that directly and indirectly influenced student-athlete academic major selection surfaced for the four factors, which included athletic coaches, student-athlete identity, academic advising, and career exploration (Amran, 2013; Andrews, et al., 2017; Henrion, 2009; Kelly, 2009). The themes found in relation to the four factors influencing student-athlete academic major selection were based on both genders and a variety of sports (Amran, 2013; Andrews, et al., 2017; Henrion, 2009; Kelly, 2009). Common themes between the four factors were also recognized.

CHAPTER 5

Summary and Conclusions

The statement of the problem for this research study was in regard to the minimal information available concerning how different factors influence student-athlete academic major selection. This study focused on the key influences on academic major selection for student-athletes based on four factors identified in research, which include athletic coaches, academic advisors, student-athlete identity, and career exploration (Amran, 2013; Andrews, et al., 2017; Henrion, 2009; Kelly, 2009). The statement of the problem extended to the limited information available in relation to the influential attributes found within each of the four factors, as well as common influences between the four factors on student-athlete academic major selection (Amran, 2013; Andrews, et al., 2017; Henrion, 2009; Kelly, 2009). In addressing the statement of the problem, the purpose of this study was to explore how each factor has influenced student-athlete academic major selection based on a collection of studies, with the factors including athletic coaches, student-athlete identity, academic advising, and career exploration (Amran, 2013; Andrews, et al., 2017; Henrion, 2009; Kelly, 2009). The research questions that were developed to address both the statement of the problem and the purpose of this study were:

1. How do athletic coaches influence student-athlete academic major selection?
2. How does student-athlete identity influence student-athlete academic major selection?
3. How does academic advising influence student-athlete academic major selection?
4. How does career exploration influence student-athlete academic major selection?

To successfully address each of the four research questions, the methodology selected for this study was a secondary research study, also known as a desk study (Largen & Morris, 2019), with a systematic review as the research design, in combination with a qualitative data analysis

(Creswell, 2016; The University of Edinburgh, *n.d.*). The data consisted of a collection of research studies that addressed each of the four research questions (Kamins & Stewart, 1993; Largan & Morris, 2019). The qualitative analysis involved a coding process based on identifying concepts and patterns from the data collection of the 20 selected studies. As noted, the four factors were athletic coaches, student-athlete identity, academic advising, and career exploration (Amran, 2013; Andrews et al., 2017; Henrion, 2008; Kelly, 2009). Based on the concepts and patterns that were coded, various themes emerged for each of the four factors.

The following section provides a detailed written summary of the findings that addressed each of the four research questions. Additionally, how the findings were connected back to the conceptual framework are discussed, as well as the alignment and comparison of the findings to the literature review. Recommendations for action and further research are provided (Creswell, 2016; Largan & Morris, 2019).

Review of Questions and Summary of Responses

Research Question 1: How do athletic coaches influence student-athlete academic major selection?

Coaches were found to indirectly influence student-athlete academic major selection through coaching styles that focused on both sport and academic success, coaching styles that prioritized success in solely sports for student-athletes, the impact coaches had on a student-athlete's ability to manage time, as well as coaches' influencing the college choice of student-athletes, with indirect components relating to academic majors including the impact coaches had on the elements of degrees, academic schedules, academic success, eligibility, and college selection for student-athletes. Notable findings in the form of themes that emerged as influential attributes in relation to athletic coaches included Balanced Coaching for both Sport and

Academic Success, Coach Prioritizes Sports Success, Coaches' Influence on Time Management, and Coach Influences College Choice.

These findings were significant, as they outlined the various athletic coaching approaches that were present in coaching student-athletes, with varying influences toward student-athlete academic major selection (Cooper et al., 2013; Hardin & Pate, 2013; Heinze, et al., 2018; Jeske et al., 2019; Kiger et al., 2007; Letawsky et al., 2003; Tajfel & Turner, 1986). For example, Coaches' Influence on Time Management surfaced as a theme in relation to coaching styles that had rigorous time and schedule demands for athletes leading to a number of student-athletes experiencing limited time towards academic pursuits (Heinze et al., 2018; Hardin and Pate 2013), with coaching demands leading to low academic performance for some student-athletes (Heinze et al., 2018). Expectations for academic performance are a component of academic major selection and have an indirect influence on academic time dedication. Concerns about time management leading to poor academic performance can influence academic major selection, as well as students' choice to select an or pursue an academic major that may have high time demands.

Balanced Coaching for both Sport and Academic Success was limited as a theme but did address how not all athletic coaches had the same type of influence based on their role as a coach towards student-athlete academic major selection. This theme was reflective of coaches that aspired to coach student-athletes for success in both their identity as a student and as an athlete (Kiger et al., 2007). An indirect influence of a balanced coaching style toward both sport and academic success may lead to student-athletes placing value toward selecting an academic major of choice based on academic interest to the same degree as their sport interest. Additionally, the theme Coach Prioritizes Sports Success exemplified how many athletic coaches' influenced

student-athletes toward prioritizing their sport, but not incorporating the component of academic success by making the most of an academic major for future career opportunities (Hardin & Pate, 2013; Heinze et al., 2018; Jeske et al., 2019). This particular theme highlights how the indirect influence of coaches not placing value on prioritizing academic success, academic majors, and career opportunities, has the potential for influencing student-athletes toward selecting academic majors that are not reflective of academic and career interests but instead as an added component to address while ensuring sports success. Similarly, the theme Coach Influences College Choice highlighted how athletic coaches' influenced the pursuit of a specific college that a student-athlete selected to attend (Cooper et al., 2013; Letawsky et al., 2003). This particular theme also represents an indirect influence toward academic major selection for a number of student-athletes, as the coach was the reason that many student-athletes decided to attend college. Academic major selection may not necessarily be an interest for this group of student-athletes, and instead considered a necessary component to pursue for the purposes of playing college level sports.

Overall, the various influences on how athletic coaches have indirectly influenced student-athlete academic major selection were found and described in four themes. The themes included, Balanced Coaching for both Sport and Academic Success, Coach Prioritizes Sports Success, Coaches' Influence on Time Management, and Coach Influences College Choice.

In connecting the findings of the first research question to the conceptual framework, Social Identity Theory (Tajfel & Turner, 1986), which expresses how a social group that one strongly identifies with can also play a dominant role in decision-making, applies to student-athletes that associate themselves strongly to their sport as a social group, as the influence of the five emergent themes, Balanced Coaching for both Sport and Academic Success, Coach

Prioritizes Sports Success, Coaches' Influence on Time Management, and Coach Influences College Choice may have all been highly influential for a student-athlete that strongly associated himself or herself with their sport and their coach. Therefore, the athletic coach may have contributed to how strongly a student-athlete's social identity towards his or her sport was further developed in relation to a higher sense of belonging to the social group of their sport (Cooper et al., 2013; Hardin & Pate, 2013; Heinze, et al., 2018; Jeske et al., 2019; Kiger et al., 2007; Letawsky et al., 2003; Tajfel & Turner, 1986)

Additionally, Cognitive Dissonance Theory (Festinger, 1957), which highlights the conflicting perspectives individuals may experience in relation to ideas, values, and decision making, also applies in connection to the themes identified, as the theory aligns with student-athletes that experienced difficulties in relation to balancing their sports and academics, which was connected to the theme of Coaches' Influence on Time Management (Heinze et al., 2018; Hardin and Pate 2013). Similarly, the theme of Coach Prioritizes Sports Success also created a sense of cognitive dissonance for student-athletes that were prioritizing their academics yet encountering difficulties with the high demands from their coach towards solely sports success (Hardin & Pate, 2013; Heinze et al., 2018; Jeske et al., 2019; Festinger, 1957).

In interpreting and aligning the findings to the literature review, the theme of Coach Prioritizes Sports Success was complemented in the literature review, as some coaches have very different coaching strategies and styles that led to focusing on only the importance of winning games and disregarding other components such as a student-athlete's success off the field in academics (Joiner, 2016). This theme was supported in a study by Calhoun (2012) who found a commonality between student-athletes mentioning their coach's lack of involvement regarding their academics. In addition, the theme, Balanced Coaching for both Sport and Academic

Success was supported in the literature review in a study by Love (2018) that focused on student-athletes expressing feelings of motivation from their coaches who were supportive and placed high expectations regarding both academic and sports success.

Research Question 2: How does student-athlete identity influence student-athlete academic major selection?

Student-athlete identity influenced student-athlete academic major selection based on the influence of time dedication in relation to student-athlete identity, athletic success being a priority in relation to student-athlete identity, academic success being a priority in relation to student-athlete identity, and how missed opportunities due to sport demands impacted student-athlete identity. Notable findings in the form of themes that emerged as influential attributes in relation to student-athlete identity included, Time Dedication based on Identity, Athletic Success as a Priority, Academic Success as a Priority, and Missed Opportunities from Sport Demands. These findings were significant as they highlighted specific elements in relation to student-athlete identity that contributed towards influencing academic major selection (Barnes et al., 2018; Barnhill & Czekanski, 2016; Cooper et al., 2013; Foster & Huml, 2017; Heinze et al., 2018; Letawsky et al., 2003; Miller et al., 2017; O’Hanlon & Potutu, 2007; Simons & Van Rheenen, 2014). For example, Time Dedication Based on Identity highlighted how student-athletes taking on the responsibilities and demands of their sports and academic schedules influenced a student-athlete’s choice of academic major (Cooper et al., 2013; Foster & Huml, 2017; O’Hanlon & Potutu, 2007). Additionally, the theme of Athletic Success as a Priority was prominent in student-athletes that valued their sport success and did not place the same importance on their academic pursuits when selecting an academic major by approaching academic majors for the purposes of maintaining eligibility to play their sport (Barnes et al.,

2018; Barnhill, & Czekanski 2016; Cooper et al., 2013; Gilson & Paule, 2011, Letawsky et al., 2003). Furthermore, several student-athletes also ranked athletic facilities as a significant consideration when selecting a college but did not mention academic majors as a consideration (Barnhill & Czekanski, 2016).

The theme Academic Success as a Priority was based on the mentalities of student-athletes that placed a high level of importance on their academic major selection, with student-athletes planning to pursue specific careers in relation to their academic major, or even engaging in academic planning to pursue graduate school (Barnes et al., 2018; Barnhill, & Czekanski 2016; Cooper et al., 2013; Gilson & Paule, 2011, Letawsky et al., 2003).

Finally, the theme Missed Opportunities from Sport Demands surfaced from student-athletes experiencing conflict within their role as a student-athlete with demands of their sport leading to missed opportunities that were related to their academic pursuits (Heinze, 2018). More specifically, missed opportunities included not being able to take specific academic majors, specific courses, as well as missing out on career development opportunities (Heinze, 2018).

Interestingly, two additional themes, Balanced Athletic and Academic Identity and Academic Engagement, emerged in relation to student-athlete identity indirectly influencing academic major selection for student-athletes. Balanced Athletic and Academic Identity surfaced as a theme for student-athletes that aspired to succeed and balance both their academics and athletics by pursuing their sport and receiving academic support as well as advisement from their teammates in relation to academics and in achieving success in a difficult major (Gilson & Paule, 2011). Additionally, Academic Engagement surfaced from student-athletes incorporating taking learning from their class and applying academic-based learning into career fields of interest (Gilson & Paule, 2011).

Overall, various influences on how student-athlete identity has directly influenced student-athlete academic major selection were found and described in five themes. The themes included, Time Dedication Based on Identity, Athletic Success as a Priority, Academic Success as a Priority, Missed Opportunities from Sport Demands, Balanced Athletic and Academic Identity, and Academic Engagement.

The findings of the second research question align with the conceptual framework of Social Identity Theory (Tajfel & Turner, 1986), which expresses how a social group that one strongly identifies with can also play a dominant role toward decision-making. If a student-athlete associated himself or herself strongly to his or her sport, then the influence of two themes Time Dedication based on Identity and Athletic Success as a Priority connected to the dominant presence of sport within social identity for student-athletes selecting academic majors based on sports success.

Dedicating time primarily to their dominant social identity toward their sport led to sports being a higher priority (Barnhill & Czekanski, 2016; Cooper et al., 2013; Foster & Huml, 2017; Letawsky et al., 2003; Miller et al., 2017; O'Hanlon, & Potutu, 2007; Simons & Van Rheenen, 2014; O'Hanlon, & Potutu, 2007; Tajfel & Turner, 1986). Additionally, the theme of Academic Success as a Priority further connects to Social Identity Theory by highlighting student-athletes that strongly identified with an academic interest that they more closely related to in comparison to their sport, and as a result selected academic majors accordingly (Barnes et al., 2018; Barnhill, & Czekanski 2016; Cooper et al., 2013; Gilson & Paule, 2011, Letawsky et al., 2003; Tajfel & Turner, 1986)

Cognitive Dissonance Theory (Festinger, 1957), which highlights the conflicting perspectives individuals may experience in relation to ideas, values, and decision making, also

applied in connection to the theme Time Dedication based on Identity, which was evident in student-athletes who experienced conflicting decisions regarding whether to prioritize their sport or academics based on time (Cooper et al., 2013; Foster & Huml, 2017; O’Hanlon, & Potutu, 2007; Festinger, 1957). The connection between Cognitive Dissonance Theory and the theme of Time Dedication based on Identity also extends to the outcome of student-athletes making decisions based on dedicating time to their sport, their academics, or striving to find a method to balance both athletics and academics (Cooper et al., 2013; Foster & Huml, 2017; O’Hanlon & Potutu, 2007; Festinger, 1957). Interestingly, Cognitive Dissonance Theory also applied to the theme Missed Opportunities from Sport Demands, in which student-athletes experienced identity conflict in relation to academic and sport pursuits, with demanding sports schedules leading to missed opportunities related to academic interests, major selection, course selection, and career development (Festinger, 1957; Heinze, 2018).

In interpreting and aligning the findings to the literature review, the themes Athletic Success as a Priority and Academic Success as a Priority aligned with studies by Love (2018), Mahoney (2011), and Henrion (2009), in that any specific interest that a student-athlete engaged in as a time investment contributed to his or her identity and also shaped his or her life choices, including the selection of a future academic major. Additionally, the theme, Time Dedication based on Identity complemented the literature review in which student-athletes may have utilized their sport as the primary determinant of academic major selection when encountering time related demands (Jeske et al., 2019). Interestingly, the theme of Athletic and Academic Balance was not discussed in relation to student-athlete identity in the literature review and brought to light a novel attribute that could influence academic major selection for student-athletes that hold strong identities towards both athletics and academics (Henrion, 2009).

Research Question 3: How does academic advising influence student-athlete academic major selection?

Academic advising influenced student-athlete academic major selection through advising methods that were based on either selecting a major that supported sports success, or selecting a major that was in support of academic interests for student-athletes. In summarizing the findings for the third research question, themes in relation to academic advising influencing student-athlete academic major selection surfaced in a total of three studies. Notable findings in the form of themes that surfaced as influential attributes in relation to academic advisors included, Advising in Support of Sports, and Advising in Support of Academics. These findings were significant, as they outlined the diverse advising styles that influenced student-athlete academic major selection. The first theme, Advising in Support of Sports highlighted advising that emphasized sports success for student-athletes and neglected incorporating student-athlete academic interests when selecting an academic major, while also encouraging student-athletes to select majors that would not conflict with their athletic schedules or were deemed difficult majors (Ayers et al., 2012; Malvaso & Navarro, 2016; Navarro; 2015). The second theme, Advising in Support of Academics, was reflective of advisors supporting academic pursuits and encouraging the selection of academic majors based on a student-athlete's interest and careers ambitions (Malvaso & Navarro, 2016).

Overall, the ways academic advisors have influenced student-athlete academic major selection were found in two themes. The themes included, Advising in Support of Sports and Advising in Support of Academics (Ayers, Dobose, & Pazmino-Celvallos, 2012; Malvaso & Navarro, 2016; Navarro; 2015).

The findings of the third research question also related to the conceptual framework. Social Identity Theory (Tajfel & Turner, 1986) which expresses how a social group that one strongly identifies with can strongly contribute toward decision-making, connected with the theme Advising in Support of Sports (Ayers et al., 2012; Malvaso & Navarro, 2016; Navarro; 2015). For example, if a student-athlete associated himself or herself strongly to his or her sport, then he or she may have been more likely to feel comfortable in connecting with advisors that favored sports participation as a priority when assisting in the selection of an academic major (Ayers et al., 2012; Malvaso & Navarro, 2016; Navarro; 2015). In contrast, if a student-athlete strongly associated his or her social identity with an academic field, then a student-athlete may have been more likely to feel connected and socially in tune with advising that supported academics, which aligns with the theme Advising in Support of Academics (Malvaso & Navarro, 2016; Tajfel & Turner, 1986).

Cognitive Dissonance Theory (Festinger, 1957), which highlights the conflicting perspectives individuals may have experienced in relation to ideas, values, and decision making, also applied in connection to the two themes Advising in Support of Sports and Advising in Support of Academics, as student-athletes that experienced conflicting perspectives in relation to selecting a major with academics as a priority or selecting a major that fits their sports schedule would experience a sense of conflict when making decisions with their advisor to select the right major (Ayers et al., 2012; Festinger, 1957; Malvaso & Navarro, 2016; Navarro; 2015).

The theme Advising in Support of Academics was supported in the literature review. For example, a study by Monda et al. (2015) demonstrated the powerful impact that academic advising can have on a student-athlete's outlook towards academic success, in addition to strongly influencing the academic major selection of a student-athlete.

Research Question 4: How does career exploration influence student-athlete academic major selection?

Career exploration as a factor influenced student-athlete academic major selection through various elements of career exploration, which were based on levels of engagement in career development, inspiration, skill development relating to time management, as well as personal interests and life goals. In summarizing the findings for the fourth research question, themes that emerged in relation to career exploration influencing student-athlete academic major selection surfaced in a total of five studies, and included, Engaged in Career Development, Disengaged Career Development, Inspirational Influences, Time Management Skills, and Life Goals/Aspirations/Personal Interests. These findings were significant, as they outlined the various attributes of career exploration that influenced student-athlete academic major selection (Brown et al., 2019, Malvaso & Navarro, 2016, Navarro, 2014, Navarro, 2015, Navarro, 2015, Paule-Koba, 2019).

For example, the theme Engaged in Career Development, highlighted how activities related to career interests such as career development courses, networking opportunities, career fairs, and speaking with professionals in career fields of interest influenced student-athlete academic major selection (Navarro, 2014; Navarro, 2015; Navarro, 2015). In contrast, the theme Disengaged Career Development was reflective of academic majors selected by student-athletes in relation to student-athletes who did not engage in career exploration due to their intensive athletic schedules and viewed their degree as a credential, rather than an opportunity for pursuing career interests (Navarro, 2015; Paule-Koba, 2019).

Next, the theme Inspirational Influences unfolded based on student-athletes following parent or mentor careers when selecting an academic major, or the influence of peer mentors

(Malvaso & Navarro, 2016; Navarro, 2015). Additionally, the theme Time Management Skills emerged where student-athlete abilities to manage time affected career development opportunities and academic major selection (Navarro, 2014). Finally, the theme Life Goals/Aspirations/Personal Interests surfaced from student-athletes being influenced to select academic majors and careers based on goals, aspirations, and personal interests (Brown et al., 2019; Malvaso & Navarro, 2016).

Interestingly, an indirect influence on student-athlete academic major selection also emanated in the theme, Career Interest Development. This particular theme was based on findings that included student-athletes expressing how life experiences and exploring potential career fields contributed to further developing their career interests (Brown et al., 2019; Malvaso & Navarro, 2016). How career exploration has influenced student-athlete academic major selection were found and described in a variety of themes. The themes included, Time Management Skills, Inspirational Influences, Engaged Career Development, Life Goals/Aspirations/Personal Interests, Disengaged Career Development, and Career Interest Development.

The findings of the fourth research question also related to the conceptual framework. Social Identity Theory (Tajfel & Turner, 1986). expresses how a social group that one strongly identifies with can also play a dominant role toward decision-making. For student-athletes that associated themselves strongly to their sport, the two themes Disengaged Career Development and Time Management Skills were connected (Navarro, 2015; Paule-Koba, 2019; Tajfel & Turner, 1986). For example, student-athlete identities that were strongly connected to their sports social group would prioritize sports in terms of time dedication, as well as investing time towards development in their sport as opposed to career development (Navarro, 2015; Paule-Koba, 2019;

Tajfel & Turner, 1986). In comparison, if a student-athlete's identity was more closely aligned with social groups involving additional career interests, life goals, or aspirations independent of their sport, then Social Identity Theory ties closely with the themes, Engaged in Career Development and Life Goals/Aspirations/Personal Interests (Navarro, 2014; Navarro, 2015; Navarro, 2015; Tajfel & Turner, 1986). Additionally, student-athletes that felt a closer sense of social belonging in terms of their identity with family and role models such as coaches and mentors, may have aligned their social identity based on Social Identity Theory more closely with the theme of Inspirational Influences (Malvaso & Navarro, 2016; Navarro, 2014; Navarro, 2015; Tajfel & Turner, 1986)

In exploring connections to Cognitive Dissonance Theory (Festinger, 1957), which highlights the conflicting perspectives individuals may experience in relation to ideas, values, and decision making, the theory connected to the theme, Inspirational Influences. For example, in cases where student-athletes may have had more than one inspirational influence related to very different interests, student-athletes may have experienced conflicting inspirational perspectives and difficulties in decision-making (Malvaso & Navarro, 2016; Navarro, 2015; Tajfel & Turner, 1986). Similarly, the theme, Time Management Skills also connected strongly with Cognitive Dissonance Theory, as conflicts that may have arisen in managing time effectively towards various demands of sports, academics, and career exploration may have led to student-athletes experience conflicting perspectives on how and which aspect to prioritize and dedicate time towards (Navarro, 2014; Tajfel & Turner, 1986).

In connecting the findings of the fourth research question to the literature review, the findings of the theme, Time Management Skills, was unique to this study, as it was not discussed in the literature review in relation to time management skills being beneficial toward balancing

various demands of academic majors, career development, academics, and sports. However, a link to the literature review in relation to time investment toward learning different skills was noted as valuable toward career exploration and academic major selection (Foster & Huml, 2017; Ontario Provincial Government, 2015).

For the theme Life Goals/Aspirations/Personal Interests, a connection to the literature review was found in relation to tools that assisted students in selecting an academic major based on self-discovery (Kelly & Pulver, 2008). For example, learning more about personal skills, talents, and interests through personality assessment tools such as Myers-Briggs Type Indicator assisted in the decision-making process of selecting an academic major (Kelly & Pulver, 2008).

Moreover, the theme Engaged Career Development aligned directly with the literature review, in noting significant components to instill career development strengths and interests for student-athletes, which included career development skills in areas that focused on teamwork, leadership, problem-solving, creativity, and motivation, as well as facilitation through leaders in the field of academics and athletics (Andrews et al., 2017). Finally, the finding of the theme Disengaged Career Development aligned to the literature review that mentioned student-athlete disengagement toward exploring different career fields and career activities may limit interests towards future careers (Andrews et al., 2017; Jia et al., 2015).

Common Themes Between Factors

In delving deeper into examining identified themes, three common themes were noted between each of the four factors influencing student-athlete academic major selection, which included Athletic Success, Academic Success, and Time Management. In highlighting commonalities, the first common theme, Athletic Success, included three of the four factors influencing student-athlete academic major selection, which were student-athlete identity,

athletic coaches, and academic advising (Amran, 2013; Foster & Huml, 2017; Kelly, 2009). The second common theme, Academic Success, included two of the four factors influencing student-athlete academic major selection, which were student-athlete identity and academic advising (Foster & Huml, 2017; Kelly, 2009). Lastly, the third common theme Time Management included three of the four factors influencing student-athlete academic major selection, which were student-athlete identity, athletic coaches, and career exploration (Amran, 2013; Andrews et al., 2017; Henrion, 2009; Kelly, 2009). The common themes between the four factors highlighted the dominant attributes that also influenced student-athlete academic major selection (Amran, 2013; Andrews et al., 2017; Henrion, 2009; Kelly, 2009).

In further analyzing the relationship of the three major themes found in common, the themes ‘Athletic Success’ and ‘Academic Success’, which are both influences based on the factor of student-athlete identity, can be noted as being dependent on the third theme ‘Time Management’. Pursuing two time consuming roles may be the root cause of whether student-athletes prioritize success towards academics as a ‘student’ or success towards athletics as an ‘athlete’ based on the pressure to balance the demands of both when it comes to academic major selection, as well as the pursuit of success academically or athletically. The essence of time may be the key challenge that leads to student-athletes having to choose success in their sport or academics due to their competing demands. Should successful time management allow for the opportunity to achieve success equally in both sports and academics, student-athletes may be able to pursue their first choice in selecting an academic major, achieve goals in both sports and academics, while also having additional career options in relation to both sports and academics upon graduation.

Nonetheless, if the component of time management could be successfully achieved and reach an ideal state where equal amounts of time can be dedicated toward the fulfillment of both sport and academics, the factor of student-athlete identity takes center stage once again, as the question of whether a student-athlete considers both their sport and academics as equally valuable can lead to selecting a major of interest and dedicating time toward achievement in both sports as well as academics. However, if intrinsically a student-athlete primarily values their sport, as noted in the theme of 'College Selection Based on Coaches' where student-athletes decided to attend college first and foremost because of their coach with no mention of academics being a part of the equation (Barnes, Carroll, & Rhee, 2018; Cooper et al., 2013; Letawsky et al., 2003), the outcome of academic major selection even with the ability to balance time may be quite different. In the case of student-athletes primarily considering themselves as an athlete and valuing sport pursuits as their essential goal, academic majors may be selected based on any major that successfully supports dedication toward sports participation or deemed as a major that is not considered demanding. The components that may fuel and strengthen the athletic identity can be noted in the factor-based themes relating to the common theme of athletic success, includes, 'Coach Prioritizes Sports Success', and 'Advising in Support of Sports'. On the other side, the possibility that student-athletes consider their talent toward their sport as being a vehicle toward success in pursuing an academic major in relation to their academic or career dream as their most valuable goal in life, may lead to dedicating any and all additional time toward their academics and career interest. Moreover, many components may strengthen the identity of student-athletes toward academics and careers, as noted in the theme relating to the factor academic advising, 'Advisors in Support of Academics', as well as various findings relating to student-athlete life experiences, parent and family influences, mentors, in addition to various

elements of career exploration, which includes career fairs and networking opportunities contributing toward academic major selection and career interests (Malvaso & Navarro, 2016; Navarro, 2014; Navarro, 2015).

Implications and Recommendations for Action

Implications and recommendations for action based on this secondary research study directly relate to the findings. Firstly, the emerging theme, Balanced Coaching for both Sport and Academic Success, indicated a strong indirect influence that could be incorporated into designing a workshop for high school and college level coaches to help coaches acquire knowledge and develop a skill set to incorporate a balanced coaching style. The workshop could emphasize academic success just as much as sports success, while outlining strategies to achieve successful coaching in both realms, as well as enlightening coaches on how influential they can be toward both sports and academics for student-athletes (Amran, 2013). An additional component of the workshop could include sharing success stories of coaches at both the high school and college level that have empowered student-athletes to become successful in both their sport and academics. Implementing the learnings of this workshop into coaching strategies would benefit student-athletes in achieving their full potential both academically and athletically.

Additionally, in strengthening the theme Balanced Athletic and Academic Identity in relation to student-athlete identity, providing a college success program for student-athletes in high school could help student-athletes identify new talents, interests, and skills in relation to academic majors and careers. For example, student-athletes could engage in self-discovery and career exploration to identify additional interests independent of their sport and opportunities for career field experiences (Gilson & Paule, 2011). Adding a component of selecting the right academic major based on student-athlete personal interests into the college success program

would also be beneficial for student-athletes and serve the purpose of ensuring that student-athletes are well-equipped in selecting academic majors with acquired knowledge and their own independent thought.

Moreover, with the important concept of time emerging as a common theme of Time Management between the three identified factors influencing student-athlete academic major selection, which were student-athlete identity, athletic coaches, and career exploration (Amran, 2013; Andrews et al., 2017; Foster & Huml, 2017), providing a time management course in high school as well as a workshop during orientation for new students in college could help develop a valuable skill that contributes toward helping student-athletes balance both their sport and academics.

Recommendations for Further Study

A number of recommendations for further study can be beneficial in discovering additional components to help student-athletes select an academic major. The theme, Engaged in Career Development in relation to the factor career exploration outlined a number of career development tools such as internships and career preparation courses as beneficial in helping student-athletes select an academic major. Therefore, conducting a study on career exploration tools that can help student-athletes select an academic major could provide insight into which specific career tools have been most beneficial for student-athletes in relation to career exploration. For example, internships, guest speakers from various career fields, or volunteer opportunities may be considered as most beneficial for student-athletes toward academic major selection (Navarro, 2015).

Additionally, the theme of Time Management in relation to one of the three common themes found between the four factors provided insight into how time management skills can

benefit student-athletes in succeeding at balancing both their sport and their academics while also selecting their first choice of an academic major (Amran, 2013; Andrews et al., 2017; Henrion, 2009; Kelly, 2009). Conducting a study that focuses on additional skills that have helped student-athletes successfully balance both their sport and academics, while also being able to pursue their academic major of choice instead of a major for the purposes of eligibility, could provide knowledge to student-athletes that aspire to balance both sports and academics, while successfully selecting their first choice of an academic major.

Moreover, as this secondary research study focused on including a variety of influences for student-athletes overall regarding academic major selection, this study included both genders and a variety of sports. To explore more specific attributes of student-athletes, future studies can be conducted to identify factors that were most influential for either male or female student-athletes specifically, as well as individual sports.

Furthermore, with various student-athletes ranking the importance of ‘athletic facilities’ in their top ten considerations influencing their decision to attend college, with no mention of academic majors as a top ten consideration (Barnhill & Czekanski, 2016), conducting a study to explore the ways athletic facilities influence college selection for student-athletes may further highlight specific details. Conducting a study focused upon the importance of athletic facilities may also help identify key details of the influence athletic facilities may have on student-athletes, as well as why athletic facilities are a significant determinant of attending college as opposed to academic majors.

Conclusion

This chapter addressed each of the four research questions based on how attributes within each factor influenced student-athlete academic major selection, with the four factors consisting

of athletic coaches, student-athlete identity, academic advisors, and career exploration (Amran, 2013; Andrews et al., 2017; Henrion, 2009; Kelly, 2009). Recognizing the key attributes in relation to each of the four factors found in this study are beneficial in helping student-athletes achieve a strong skill set in decision-making when selecting an academic major. Various themes were identified in relation to influential attributes contributing toward the academic major selection for student-athletes. For the influential factor of athletic coaches in relation to academic major selection, themes reflecting indirect influences on student-athlete academic major selection included, Balanced Coaching for both Sport and Academic Success, Coach Prioritizes Sports Success, Coaches' Influence on Time Management, and Coach Influences College Choice. For the influential factor of student-athlete identity in relation to student-athlete academic major selection, themes that surfaced based on influential attributes included, Time Dedication Based on Identity, Academic Success as a Priority, Athletic Success as a Priority, Missed Opportunities from Sport Demands, Balanced Athletic and Academic Identity, and Academic Engagement. For the influential factor of academic advising in relation to academic major selection, the themes that surfaced in relation to influential attributes toward student-athlete academic major selection included Advising in Support of Sports, and Advising in Support of Academics. For the influential factor of career exploration in relation to academic major selection, themes reflecting influential attributes on student-athlete academic major selection included, Time Management Skills, Inspirational Influences, Engaged Career Development, Life Goals/Aspirations/Personal Interests, Disengaged Career Development, and Career Interest Development.

Three common themes were found among the four factors, which included Athletic Success, Academic Success, and Time Management. In further analyzing the connection

between the three themes, the inability to balance time in relation to dedicating time toward academics and sports, led to a number of student-athletes not being able to select their first choice in academic major selection, and feeling overwhelmed with catering to both sport and academic demands. If successfully balancing and managing time became an option, then student-athletes may have the opportunity to select their first choice for an academic major, while also achieving academic and sport goals successfully. Nonetheless, even with the accomplishment of successfully balancing time, student-athletes who solely place value on sports success may still dedicate any and all additional time towards achieving sports success. In contrast, student-athletes who may only value their academic major and academic success, and consider sports as a vehicle toward various college opportunities and options, then additional time may be primarily dedicated toward the pursuit of success for their academic major as opposed to sport related goals, despite being able to balance and dedicate time towards both sport and academic goals.

Recommendations for action reflect findings, including a workshop dedicated toward strategies for high school and college level athletic coaches to successfully incorporate the importance of academic major selection, as well as academic and sport success when working with student-athletes. Secondly, providing college success programs in high school to help student-athletes engage in self-discovery and career exploration to be better prepared in selecting an academic major will improve student-athletes' decision-making. An additional recommendation is to provide a time management course in high school and during college orientation to help student-athletes successfully balance their time toward succeeding in their academic major selection as well as sports goals. Finally, recommendations for further study include exploring career exploration tools that student-athletes have found to be most significant toward academic major selection, as well as identifying skills in addition to time management

that student-athletes have found to be helpful in balancing sports and academics, exploring individual studies on factors influencing academic major selection based on individual gender, or specific sports, and exploring why athletic facilities as opposed to academic majors have been considered as an important determinant for student-athletes in considering attending college.

Overall, student-athletes have an opportunity to shine in their sport and academics. As the majority of student-athletes have already selected their sport of interest when pursuing college, student-athletes must be educated about the importance of academic major selection and in successfully selecting an academic major that is reflective of their interests and future careers so that they can make the most of their talents and abilities (Navarro, 2015). By selecting the sport of choice to excel in, and the academic major of choice to succeed towards, student-athletes are able to fulfill both the 'student' component, and the 'athlete' component of their identity as a student-athlete, and strive towards achieving their full potential as a student-athlete.

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APPENDIX A

List of 20 Peer-Reviewed Studies Selected for Data Collection

1. Student-Athletes vs. Athlete-Students: The Academic Success, Campus Involvement, and Future Goals of Division I Student Athletes Who Were University Bound Compared to Those Who Would Not Have Attended University had They Not Been an Athlete

APA Citation:

Jeske, D.R., Kress, J., Vogel, B.L. (2019). Student-athletes vs. athlete-students: The academic success, campus involvement, and future goals of Division I student athletes who were university bound compared to those who would not have attended a university had they not been an athlete.

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2. Factors that Influence the Academic Performance of NCAA Division I Athletes

APA Citation:

Ridpath, B. D., Kiger, J., Mak, J.Y., Eagle, T.R., & Letter, G. (2007). Factors that influence the academic performance of NCAA Division I athletes. *The SMART Journal*. Retrieved from

http://mds.marshall.edu/cgi/viewcontent.cgi?article=1158&context=mgmt_faculty

3. Playbook vs. Textbook: Examining Academic Transitioning of NCAA Division I-FBS

APA Citation:

Hardin, R., & Pate, J.R. (2013). Playbook vs. textbook: Examining academic transitioning of NCAA Division I-FBS football student-athletes. *Journal for the Study of Sports and Athletes in Education*. Retrieved from

<https://www.tandfonline-com.une.idm.oclc.org/doi/full/10.1179/1935739713Z.00000000014>

4. Playing Multiple Positions: Student- Athlete Identity Salience and Conflict.

APA Citation:

Heinze, K.L., Di Lu, L., & Soderstrom, S. (2018). Playing multiple positions: Student-athlete identity salience and conflict. *Journal for Intercollegiate Sport*. Retrieved from

<http://web.b.ebscohost.com.une.idm.oclc.org/ehost/detail/detail?vid=0&sid=cbeeea11-3200-4e79-803c-bb0f7dedd011%40pdc-v-sessionmgr05&bdata=JnNpdGU9ZWwhvc3QtbG12ZSZzY29wZT1zaXRl#AN=133789345&db=s3h>

5. The Relationship Between Athletic Identity and Academic Major Chosen by Student-Athletes

APA Citation:

Foster, S., & Huml, M.R. (2017). The relationship between athletic identity and academic major chosen by student-athletes. *International Journal of Exercise Science*.

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http://web.b.ebscohost.com.une.idm.oclc.org/ehost/pdfviewer/pdfviewer?vid=1&sid=792_70e86-6320-4831-bae4-25babdf28532%40sessionmgr120

6. Recruiting the Student-Athlete: An Examination of the College Decision Process

APA Citation:

Barnhill, C.R., & Czekanski, A.W. (2016). Recruiting the student-athlete: An examination of the college decision process. *Journal for the Study of Sports and Athletics in Education*. Retrieved from

<https://www-tandfonline-com.une.idm.oclc.org/doi/full/10.1080/19357397.2015.1122999>

7. Does Athletic Participation Benefit or Hinder Academic Performance? Non-revenue Sport Athletic Experiences

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