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FACTORS AFFECTING STUDENT-ATHLETE MENTAL HEALTH SUPPORT WITHIN
ATHLETIC DEPARTMENTS

by

Carlie Caren Corrigan

A Thesis

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Abstract

Student-athletes as a subgroup on college campuses experience challenges related to their dual identities. Similarly, to their non-athlete peers, student-athletes face stress related to enrollment in addition to stressors related to athletic participation. The institution, individual athletic departments, and the NCAA govern participation in collegiate athletics, and have the ability to greatly affect the culture and experience of being a student-athlete. The combination of student and athlete identities imposes a need for this subgroup to be monitored and acknowledged by the overarching entity that is athletic departments. Although there are some models of best practices in supporting student-athlete mental health, the varying degrees of supports is call for concern.

In a quantitative analysis, this study surveyed NCAA athletic department personnel from a variety of institutions. Using one-way ANOVA and multiple regression analysis' to identify participant's respective institution's mental health supports, NCAA division, financial aid, and money allocation were evaluated. Participants included in this study mostly consisted of athletic academic staff and athletic administration through the National Association of Academic and Student-Athlete Development Professionals listserv. The findings of this study presented a discrepancy between supports provided and NCAA division and money allocated. The study also found a significant difference between providing a support and mandating the use of supports.

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Chapter I

Introduction

Collegiate athletics is an environment unlike any other. Student-athletes at all levels experience challenges and triumphs physically, mentally, and emotionally different from their non-athlete peers for the duration of their athletic involvement. Although these issues are not unique to student-athletes, their athletic identity poses distinctive differences in support, resource availability, and mental health stigma. According to Brewer, VanRaalte, and Linder (1993), sport participation is strongly associated to conformity and athletes with a strong athletic identity tend to neglect other aspects of their life. Over association with athletic identity inhibits student-athletes from experiencing all aspects of a college environment.

Background of the Problem

Mental Health

In recent years the visibility of mental health concerns and conversations have become increasingly present in day-to-day life and throughout media outlets. The discussion surrounding mental health has recently shifted from a personal, intimate conversation to being more of a suggestive and supportive conversation regarding ways to cope and combat these challenges. College environments play essential roles in the growth and development of young adults in the United States. According to Eisenberg, Downs, Golberstein, and Zivin (2009), approximately three quarters of mental disorders have onset by age 24, and approximately one half of American youth attend postsecondary education. The likelihood of mental health disorders becoming present during traditional aged college students enrollment emphasizes the necessity for campuses nation wide to be innovative and progressive in their approached to mental health support on campus. Over the past several decades mental healthcare on college campuses as

shifted from informational needs to acting as a function of addressing severe psychological problems (Kitzrow, 2003). This shift over the past several decades is one calling for continual education and support among college campus faculty, staff, and students. One of the main contributors to mental health concerns in college students is depression and depressive symptoms. According to Yang, Peek-Asa, Corlette, Cheng, Foster, and Albright (2007), depression in college students is a gateway to substantial disabilities and many time associated with negative health behaviors including alcohol and drug abuse. Not only can depression act as a gateway to additional negative health behaviors, but it can also be a result of psychological disturbances such as anxiety or overly stressful environments (Yang et al., 2007). The college environment, as well as collegiate athletics, is ever changing and many students are challenged with schedules and responsibilities that may at first be unfamiliar to them. Recognizing the challenges students face with new or additional roles within the college landscape is critical to connecting these roles and stressors to changes in their mental health.

College students, both athletes and non-athletes, have the opportunity to hold any number identities within and outside of the campus environment. In addition to sport participation, student-athletes may be involved in other facets of the college environment. However, there are three distinct differences between athletic identity and identities related to other roles. Student-athlete's athletic identity is established early in their development, uniquely public (Webb, Nasco, Riley, & Headrick 1998), and significantly influenced by the organizational culture of intercollegiate athletic departments (Jayakumar, & Comeaux, 2016). Although student-athletes are the participants of intercollegiate athletics, their experiences can, in some cases, be over powered by the relationships and decisions within athletic departments. According to Schroeder (2010), "the millions of dollars that can be gleaned from media, sponsors, boosters, and post-

season appearances can entice leaders into making changes that are inconsistent with the departments assumptions” (p. 104). Organizational culture within athletic departments plays an essential role to how student-athletes are assessed in regard to their mental health. For example, if the department leadership values positive mental health, they may mandate a number of student-athlete mental health programs or initiatives be implemented. The variability of values and resource allocation within athletic departments perpetuates the assumption that mental health is not a regulated concern within athletic departments. These factors give insight into the underlining causes of mental distress among student-athletes.

Mental health stigma is present throughout society as a whole, but is many times exasperated amongst the student-athlete population. Previous evaluations of student-athlete mental health attitudes concluded that college athletes under utilize psychological services, despite approximately 10-15% of collegiate student-athletes experience mental health issues significant enough to necessitate psychological evaluation (Kaier, Cromer, Johnson, Strunk, & Davis, 2015). Competitively, 8-9% of non-student-athletes campus wide report psychological issues that warrant psychological evaluation (Gallagher, 2005). The inhibiting factor of collegiate student-athletes utilizing mental health support was a result of the stigma of such services. Kaiser and colleagues cite the culture of athletics perpetuates stigma associated with mental health by emphasizing self-reliance, prioritizing team over self, and the public nature of many campus counseling centers for well-known student-athletes (Kaier et.al. 2015). Acknowledging the role of athletic stigma and culture in student-athlete’s perception and actions in regard to mental health is a critical component to better combating this subgroup’s attitudes and adequately meeting their needs.

Understanding that athletic identity and stigma is an inhibiting factor in positive student-athlete mental health is essential to a change in monitoring protocol within athletic departments. Not only are these factors distinct between student-athletes and non-athletes, but also between divisions of NCAA student-athletes. Resource allocation amongst NCAA sanctioned programs is a result of division level. Athletic departments across the country promote healthy behavior, however for many departments mental health is not prioritized. Lack of priority of mental health within athletic departments is inhibiting the success of student-athletes and the overall department. The number of collegiate student-athletes combined with the amount of money made by the NCAA and allotted to each institution solicits the question: what factors within athletic departments affect the number of mental health supports provided to student-athletes?

Student-athlete mental health and mental health support and programing are critical components to the collegiate athletic environment. The internal and external wellness of student-athletes should be at the forefront of industry practitioners' concerns. Student-athletes are evaluated based on their individual physical attributes and cleared to compete. However, most student-athletes' mental well-being is not evaluated equally to their physical ability. This is cause for concern due to the amount of stress and stress induced anxiety and depression is present among the student-athlete population. Being able to determine what the limiting factors are within athletic departments to provide adequate mental health support and programing for student-athletes would better serve the population as well as support their mental well-being.

The National Collegiate Athletic Association (NCAA), as the governing body of intercollegiate athletics, has fundamental rules and regulations for institutions to abide by in order to participate in athletic competition. This governing body regulates college athletics on a scale from money distribution per institution to best programing and support practices for

student-athletes. In addition, the NCAA sets academic completion standards for student-athletes to abide by in order to maintain eligibility. These regulations, in addition to individual institutional standards, challenge student-athletes to balance both their individual student identity with their identity as an athlete.

Theoretical Framework

Urie Bronfenbrenner, the theorist behind Developmental Ecology, classifies human experiences through a person-environment context (Patton, Renn, Guido, and Quaye, 2016). His work has analyzed the human experience from a broad macro level down to an individual micro level. Bronfenbrenner's model describes the factors of human development as being process, person, context and time (PPCT) (Bronfenbrenner, 1979, 1993, 2005). It is important to understand Bronfenbrenner's developmental model and its application to the experience of college students, in order to apply it to student-athlete as a subgroup within the campus environment. The ecological approach to development ensures that individual differences and multidimensional contexts are considered when examining a person's holistic development (Patton et. al., 2016). Using Bronfenbrenner's ecological framework to explore the relationships between student-athletes and their environments will help to understand the role their environments play in supporting their unique mental health needs.

Problem Statement

Collegiate student-athletes are a subgroup of college campuses that many times represent institutions in a national, public light. This study examined institutional variables that effect programing, or lack thereof, that supports student-athlete mental health as well as dissect reasons that the student-athlete experience solicits particular support programs within athletic

departments. The examination of student-athletes as a subgroup and concerns regarding mental health will be framed around identity theory. Through a post-positivist, quantitative lens I identified and explored the limitations of student-athlete mental health programming and support within athletic departments.

As collegiate athletics continues to grow in both its student participants and revenue generation, it is important that student-athlete services provide appropriate and adequate mental health resources to support their participation. Similarly, to other initiatives for academic and career development, institutions need to become intentional about the resources available to student-athletes. Collegiate athletic departments are shaped by cultural and historical forces that impact the decisions made in regard to the marginalized group of students that is student-athletes. This marginalized group faces an increase number of stressors that dissimilarly effect their non-athlete peers such as injuries, maintaining eligibility with full course loads, balancing social and leisure activities, interpersonal challenges, time demands related to practice, and participation in sport (Beauchemin, 2014). Not only are the exasperated stressors essential to understanding the impact of mental health support within athletic departments, but understanding the stigma of mental health within athletic departments is also essential. Kroshus (2014) reported student-athletes who participated on teams or within athletic departments that did not stigmatize mental health and encouraged health seeking behavior to have a more positive experience in collegiate athletics. The NCAA as the governing entity of the majority of collegiate athletic programs distributes revenue to member schools. The revenue distribution is dependent on divisions, and the resources allocated is also dependent on division. Division I, II, and III institutions allocated and distributed a total of over one billion dollars in 2016 (“Where does the money go?”, 2018). Mental health is an issue facing many college student-athletes whose

performance generates over a billion dollars. Each NCAA division spends money on similar resources and supports for student-athletes, however, there is not specific funds dedicated to student-athlete mental health (“Where does the money go?”, 2018). This study addressed key variables within athletic departments that influence the allocation of resources and programs specific to the mental health of student-athletes. The null hypothesis of this study is: there is no relationship between institutional variables and the number of mental health services provided to student-athletes within athletic departments. This hypothesis aimed to address why student-athletes across all three NCAA governed institutions do not have equal access to mental health services within their individual athletic departments. Student-athletes are at an increased risk of suffering from anxiety and depression than their non-athlete peers due to their athletic identity and participation. Department variables such as NCAA division, federal funding, and money allocation may explain the inconsistencies of mental health programing across athletic departments.

Definitions

Athletic identity: “the degree to which an athlete identifies with the athlete role “ (Brewer, Van Raalte, & Linder, 1993, p.237)

Student-athlete: students participating in athletic competition at NCAA member institutions to increase their physical and moral fortitude

National Collegiate Athletic Association (NCAA): the oldest, wealthiest, and most powerful of the national associations, governing the largest, richest, and most popular sports programs in higher education

Depression: a medical illness accompanied by symptoms of fatigue, sadness, self-limiting attitude, neglect, disability, and guilt

Anxiety: a result of behavior, a physiological, psychological and emotional outcome when we behave in an apprehensive manner.

Chapter II

Literature Review

Summary

The student-athlete population is a critical part of college campus environments. This unique population represents institutions on a scale that no other organization or group on campus does. Due to the demands necessary for collegiate athletic participation, collegiate student-athletes' experience the campus environment vastly different than their non-athlete peers. Their experiences differ both within themselves as well as between other individuals and campus groups. Some of the main concerns regarding the mental health of student-athletes is the number of individuals who suffer from anxiety and depression. The degree to which a student-athlete identifies with their role on an athletic team is critical to understanding the role athletic identity plays in student-athlete mental health. The NCAA serves student-athletes in many ways, one of those ways being support programs. Among these support programs is athletic training, academic and career/personal development. Mental health services fall partially into both of these support categories, but actual services and support vary between institutions and NCAA divisions.

Student Development Theories-Bronfenbrenner

Patton et. al. (2016) applied Bronfenbrenner's developmental ecology model to the experiences of students, which is applicable to the experiences of student-athletes. The importance of understanding the components of student development in college is essential to meeting the needs of diverse college populations. An ecological model considers individual differences of students, which assists student affairs professionals in promoting a healthy campus

environment and optimizing student growth (Patton et. al, 2016). Similarly, to institutions' student affairs professionals understanding the PPCT of all students, professionals whom specialize in student-athlete support or development must take into consideration developmental factors on the entire institution, as well as athletic departments and the NCAA. Developmental ecology is distributed throughout four systems affecting a student. These systems are described as students' microsystem, mesosystem, exosystem, and macrosystem (Renn and Arnold, 2003). Microsystems can be described as "a pattern of activities, roles, and interpersonal relations experienced by the developing persons in a given face-to-face setting" (Bronfenbrenner, 1993, p. 15). Examples of a student-athlete's microsystem are their roommate(s), teammates, coaches, family, or instructors/classmates.

Building from microsystems, Bronfenbrenner (1993) describes mesosystems as the relationship between microsystems in two or more settings, specifically the effects generated by these systems that either encourage or inhibit development of a student. For example, the interactions between student-athletes' coaches, academic counselor, and professors, shape the day-to-day environment that they live in. These interactions, whether positive or negative, play a role in a student's feeling of security and impact both their ability and desire to grow and develop holistically.

Students are affected by several factors they may or may not know exist and impact their lives. Bronfenbrenner (1993) labels these factors as exosystems; or groups or systems that do not contain the developing individual, but exert influences on their environments through interactions with the microsystems. Examples of elements within a student-athlete's exosystem could be NCAA policies, or athletic department administrators who make budget decisions.

These factors play a significant role in student-athletes' experiences, but they may or may not come into direct, regular contact with a student-athlete.

As there are factors that contribute to the external environment of a student-athlete which are not directly impactful to them, there are also factors affecting their experiences and environment that are even out touch from their other systems. Macrosystems as described by Bronfenbrenner (1993), "consist of the over-arching pattern of micro- meso- and exosystems characteristics of a given culture, subculture, or other extended social culture, with reference to lifestyles, opportunity structures, and social interchanges" (p.25). Examples of contributing macrosystems in the experiences of student-athletes are secondary education systems, historical assumptions and trends for marginalized students, and cultural capital of a group. These factors and systems impact the external environment and its entities, which play a significant role in how institutions identify and support its students.

Mattering and Marginality

College student experiences vary based on a number of independent factors. There are internal and external influences that play a significant role in the lives of college students. One aspect of student development that plays a role in impacting students is their marginality of their identities and experiences. Nancy Schlossberg, an adult development theorist, is cited describing marginality in college student's experiences as "a sense of not fitting in that can lead to self-consciousness, irritability, and depression" (Patton, Renn, Guido, & Quaye, 2016, p. 36). Non-athlete college students feel the impact of marginalized identities due to their race, class, or gender; while college student-athletes may feel those contributing factors in addition to their marginalized identity as a student-athlete. Students feel marginality when they acquire new roles and when there is uncertainty within a role (Patton et. al., 2016). Student-athletes experiences

can be unpredictable due to the nature of competition and the collegiate athletics environment. Factors such as coaches, fans, resources, and institutional policy impacting student-athletes can cause confusion in terms of what their role should be within a given environment.

As previously discussed, systems and groups of influence can range from people with direct contact with student-athletes, to long time historical policies in place. Systems in place are designed to support student-athletes through their experiences. However, some of these systems perpetuate other flawed systems that contribute to challenges faced by students. Higher education systems are known to stigmatize student-athletes as a campus subgroup similarly to other marginalized groups throughout campus. According to Dovidio, Major, and Crocker (2000), a stigma involves recognition of difference based on a distinguishing characteristic or mark. In the instance of student-athletes, their distinguishing characteristic is the time dedicated and platform of collegiate sport participation. However, the marginality and stigmatization of student-athletes largely depends on the context in which they are being perceived. According to Simons, Bosworth, Fujita, and Jensen (2007), stigmas can expand from a fixed characteristic to a context depending on social construction shaped by cultural and historical forces. Not only do student-athletes face stigmas associated to their identity, but they also face other issues because the student-athlete cohort is considered a marginalized group. Student-athletes' marginalized athletic identities are perpetuated through macrosystems such as historical ideals of student-athletes and the climate of the government at a given time because of how they financially support institutional entities. Building on student-athlete marginality, this population may be faced with other marginalized identities that force greater stress onto their college experiences. Given the diverse identities within collegiate athletic departments, marginalized and stigmatized identities such as race, class, and gender are present, and contribute additional stress to student-

athletes whom are already at an increased risk of developing mental health problems related to stress and athletic identity.

Student-athlete Identity

College environments provide and encourage a variety of opportunities for its student population. These opportunities assist in shaping students' identities and ultimately impact their overall experience and life. As one of the subgroups on campuses, student-athletes are challenged with managing both their identity as a student as well as an athlete. Most students use college as an exploratory time to create and shape their individualized identities; however, student-athletes are taxed with balancing their individualized identity desires with particular aspects that inevitably accompany their identity as a student-athlete. Identity, generally speaking, is known as "integration of the self, in which different aspects come together as a unified whole" (Deaux, 1994, p.259). College students are afforded the opportunity to determine their social identity by choosing areas of involvement that coincide with their idea of self. Similarly, students who choose to be involved in collegiate athletics are also choosing to be identified as a student-athlete. Although it is a students' choice to be a student-athlete, it is not always their understanding or choice that athletic identity comes with fixed associations.

Association with groups on college campuses is far from abnormal behavior. However, athletic identity is unique in its function acts as a commanding entity in student-athletes self-awareness. According to Proios (2017), "athletic identity is part of one's self-identity that enables value and meaning of taking a part in exercise and competing". Dissecting this definition is essential to paralleling it to the importance of mental health support and programing of student-athletes. Athletic identity expects a certain level of commitment to the beliefs and norms of the value of exercise and competition. This is related to the amount of pressure, which turns

into stress responses, student-athletes experience and results in symptoms of depression and anxiety.

Students whom are part of the student-athlete subgroup are challenged to identify with their commitment to athletics in dissimilar ways that other campus groups and organizations. In some cases, the identity of a student-athlete can negatively affect their personal development and experiences as a college student. One of the risks associated with student-athlete identities is known as identity foreclosure. According to Marcia (1966) and Petitpas (1978), identity foreclosure is the absence of exploratory behavior during the commitment of an occupation or ideology, and one being set in ways without any personal searching. Research has shown that particular aspects of the student-athlete identity create turmoil within their identity. This turmoil is said to be a result of the commitment, dedication, and demands of intercollegiate athletics, that interferes with the opportunities of exploratory behaviors (Chartrand & Lent, 1997; Nelson, 1983; Petitpas & Champagne, 1988). The over identification of the athlete role is cause for concern when considering a student-athlete's psychological state. The factors of athletic identity could be cause for isolation due to over identification.

Another challenge faced by students when they commit solely to their athletic identity is the lack of exploration of other possible roles (Lally, 2005). Identifying with one's sport group is part of the culture or sport, especially collegiate athletics. However, an issue arises when one's sole identity is centered on sport participation and unable to take advantage of other opportunities around college campuses. Narrowing a student-athletes worldview to that of their one athletic identity takes away from the possible interactions between their other developmental systems. There are numerous factors affecting how a student-athlete's identity is formed, but by

isolating oneself to a singular form of personal identification is parallel to isolating oneself from further possible development.

Even though sport participation offers many healthy behaviors, the stressors that are the result of participation influence the mental wellbeing of the student-athlete population. One of the elements of athletic identity to consider is the culture of the sport environment and behaviors that are encouraged and discouraged. Sport groups describe dynamics in relationship to mental wellbeing as “the extent to which mental health issues and help-seeking are stigmatized or encouraged” (Kroshus, 2014, p. 74). Understanding the dynamic of sport groups is essential to identifying why student-athletes may need additional mental health support in comparison to their non-athlete peers. It is also important to understand that sport participation does not automatically induce negative effects on one’s mental health and often times positively influences a student’s collegiate experience. However, teams that do not stigmatize disclosure of mental health conditions and encourage help seeking can be influential positive forces on the student-athlete experience (Kroshus, 2014). Athletic and group identities are essential to student-athlete mental health and overall college experience. It is imperative to connect the dynamic of sport teams with athletic identity to understand how their function interconnects in addressing mental health and student-athletes.

NCAA Financial Distributions

The student-athlete subgroup experiences formal competition through education’s individual institution boundaries and the National Collegiate Athletic Association (NCAA) as a governing body. As a governing body, the NCAA publishes documents related to organizational progress, best practices, and general information regarding programs, events, and association updates. The NCAA classifies institutions into three separate divisions of sport competition

based on specific institutional criteria. These divisions are described as Division I, Division II, and Division III. Division I is generally known to be the “highest” in terms of competition level and playing opportunities, being required to sponsor “at least seven sports for men and seven for women with two team sports for each gender” (*“Divisional differences and the history of multidivisional classification”*, 2018). Other criteria Division I schools must meet include playing 100 percent of their minimum competitions against other Division I schools, meeting minimum financial aid awards for athletic programs, and not exceeding maximum financial aid awards within their athletic programs (*“Divisional differences and the history of multidivisional classification”*, 2018). Each institution is considered Division I by the above requirements. However, there are four different classifications with the Division I tier. The first and wealthiest classification is Football Bowl Subdivision (FBS) Autonomy division. FBS autonomy is made up of the Southeastern, Big Ten, Atlantic Coast, PAC-12 Conference, and Big-12 conferences (Hosick, 2014). These five conferences differ from other Division I institutions because they are the five highest revenue-producing conferences in the country (Hosick, 2014). Although there may be other institutions that win equally or more as much as these member schools, they overall produce the five highest revenues of any institutions. One of the distinct differences between FBS autonomy and non-autonomy is that FBS autonomy institutions have the flexibility to “change rules for themselves in a list of specific areas within Division I” (Hosick, 2014). This flexibility is important as it allows these institutions to cater to the wants and needs of its populations more than other NCAA governed institutions. The second subdivision of Division I is FBS Non-autonomy institutions, which includes other Division I institutions that qualify for NCAA Bowl games and have an average attendance requirement of 15,000 fans (*“Divisional differences and the history of multidivisional classification”*, 2018). One of the differences

between FBS and FCS institutions is their attendance requirements and championship play. Unlike FBS institutions, it is not necessary for FCS institutions to meet attendance requirements (“Divisional differences and the history of multidivisional classification”, 2018). Members of FCS institutions also compete for a single national championship, rather than have the opportunity to participate in a bowl game as FBS participants do. The third and final sector of Division I athletic categories is institutions that do not compete in either FBS or FCS categories because they do not fund a football program.

Institutions are classified as Division II per the NCAA if they “sponsor at least five sports for men and five for women, with two team sports for each gender, and each playing season represented by each gender” (“Divisional differences and the history of multidivisional classification”, 2018). Division II programs are financed differently than Division I. Student-athletes of Division II athletic programs are financed through institutions’ budget similarly to any other academic department on campus (“Divisional differences and the history of multidivisional classification”, 2018). Also, these institutions’ competitions are generally regionally rather than nationally based (“Divisional differences and the history of multidivisional classification”, 2018). Although there are some similarities between Division I and Division II institutions, Division III institutions vary tremendously from the other divisions. NCAA Division III institutions are categorized as such by

“having to sponsor five sports for men and five for women, with two team sports for each gender, and each playing season represented by each gender, student-athletes receive no financial aid related to their athletic ability, and athletic departments are staffed and funded like any other department in the

university” (“Divisional differences and the history of multidivisional classification”, 2018).

Although all three NCAA divisions serve to provide competitive athletic opportunities for student-athletes, the advantages and experiences between these divisions can be vastly different.

Not only are NCAA institutions divided by participation requirements, but also by the amount of money that is distributed to each division. The NCAA distributes revenue throughout all three of its divisions. However, the distribution to Division I institutions is significantly different than that of Division II and III. The NCAA categorizes and distributes revenue through eight categories specific to Division I; they are, sport sponsorship and scholarship funds, Division I basketball performance fund, Division I championships, student assistant fund, Division I equal conference fund, academic enhancement fund, and Division I conference grants (“Where does the money go?”, 2018). The total amount of revenue generated and redistributed in 2016 was around \$950,000,000 (“Where does the money go?”, 2018). This distribution was divided as follows: basketball performance fund \$160,500,000, sport sponsorship and scholarship funds \$210,800,000, Division I championships \$96,000,000, student assistance fund \$82,200,000, Division I equal conference fund \$50,300,000, academic enhancement fund \$46,700,000, and Division I conference grants \$9,500,000 (“Where does the money go?”, 2018). Per this distribution plan student wellness services fall under both the student assistance fund and the academic enhancement fund (“Where does the money go?”, 2018). Throughout Division I institutions there has been a space created to financially support and emphasize student-athlete wellness. As the previous data shows, services provided to assist and support students outside of athletics are significantly underfunded in comparison to those that benefit athletic competition.

In spite of the money distributed to student-athlete support being lower than other distributions at the Division I level, it is specifically included in budgeting and services provided unlike at other NCAA division levels. At the NCAA Division II level, the total amount of money distributed from the NCAA in 2016 was \$42,700,000 (“Division II Budget Overview”, 2017). This number was divided into five areas to support athletic programs. The five areas and money allocated to those areas is as follows: Divisions II championships \$23,058,000, enhancement fund \$6,405,000, conference grants 2,989,000, other grants and scholarships \$1,708,000, and strategic initiatives \$8,540,000 (“Division II Budget Overview”, 2017). Of the money distributed to Division II schools academic and support services fall into the “other” category. Not having a specific fund for student-athlete services or support in Division II athletic departments attributes to the lack of emphasis that these institutions place on support service.

Even more than Division II institutions, NCAA Division III institutions’ funding is less evenly distributed. Of the entire revenue allocated by the NCAA, Division III athletic departments receive only 3.18% or \$30,200,000 of said revenue (“Division III 2017-2018 facts and figures”, 2017). Along with the extremely low percentage that is allocated to these intuitions, the distribution of that percentage is also vastly different than other divisions. About 75% of the money received from the NCAA to Division III schools is spent on championship experiences for student-athletes, while the other 25% is divided into non-championship programing and educational resources and initiatives (“Division III 2017-2018 facts and figures”, 2017). The low portion of money dedicated to other nonathletic services at the Division III level goes against the values of the NCAA as a whole. The divisional differences between NCAA sponsored athletic departments are clearly defined and can be linked to the number of resources and support programs available to student-athletes.

Student-athlete Mental Health

College environments house opportunities to learn and grow in many aspects of life. However, within this environment it is noted that many students are faced with challenges that go beyond the classroom. College students may suffer from symptoms of depression and anxiety that, in some cases, have led to an increased stress response. A survey of college students reported that 19.4% of the traditional college aged population (18-25) suffer from some type of mental health disorder such as anxiety or depression (Locke, Wallace, & Brunner, 2016). The areas affected by depression can include but are not limited to academics, sleep, and stress levels (Bell, Barclay, and Stoltz, 2014). Students on college campuses are faced with a wide variety of stressors ranging from course work to the financial stress that accompanies attendance. In a study done by Shannon Ross, Bradley Niebling, and Teresa Heckert (1999), the most commonly reported stressors by college students were identified as change in sleeping habits, vacations/breaks, change in eating habits, increased class workload, change in social activities, and financial difficulties.

The stressors presented above are present in the overall student population, as well as the student-athlete population as a subgroup. However, collegiate student-athletes are challenged with an even more stressful experience due to their athletic identity. Some of the most common stressors that student-athletes face that differ from their non-athlete peers include injuries, maintaining eligibility with full course loads, balancing social and leisure activities, interpersonal challenges, time demands related to practice, and participation in sport (Beauchemin, 2014), stereotypes from the media, and physical stress and fatigue (Brewer & Petrie, 2014). These stressors, in combination with the stress that any student faces throughout college, generate an intensely taxing environment for student-athletes. It is necessary to consider the preceding

stressors when evaluating contributing factors to student-athlete mental health issues, as well as evaluating athletic department's emphasis on providing programming and support geared towards their unique experiences.

Student-athletes and non-athlete students all encounter stressors and challenges throughout their college experiences that may lead to an increase in stressors as well as diminished mental health. Joy, Gayles, and Bell (2018), describe student-athletes as being more susceptible to mental health issues because of their participation in athletics. Acknowledging depression, anxiety, and stress can lead to an increased stress response is imperative to its association with student-athlete mental health concerns. Thompson and Sherman (2007) describe the role that these stressors play as "particularly relevant when considering that stress can exacerbate existing mental health conditions" (p.268). The connection between stress and depression/anxiety becomes increasingly worrisome among student-athletes due to these psychological states' relationship with suicide and suicidal ideations. The role of sport is imperative to examine when considering student-athletes who suffer from depression and anxiety. According to Chris Bader, athletic identity perpetuates stress of student-athletes because of the constant fear of positions get taken away due to a depressive state, which in turn can serve to further their depression (2014). The increased number of stressors as well as the role of depression and anxiety on student-athletes' psychological state is imperative for athletic departments to consider when attempting to support and distribute appropriate resources for their population's mental health needs.

Student-athlete Services

Collegiate athletic departments serve many roles in the day-to-day life of a student-athlete. They are comprised of departments such a marketing, finance, compliance, strength and

conditioning, special events, ticketing, athletic training and academic services. Some of these departments have day-to-day direct contact with student-athletes, while others function more in a strictly administrative role with less student-athlete face time. Division level of an institution contributes to the distribution of departments' resources. However, among these student-athlete service roles it is expected that certified athletic trainers (AT) are monitoring any institutionally sponsored athletic participation time. According to the National Athletic Trainers' Association (NATA)(2018), the role of athletic trainers includes being accessible for emergency medical care during participation as well as ongoing daily health care for student-athletes. Although it is ATs' responsibility to monitor overall student-athlete health, the capacity to which they are qualified to monitor mental health is lacking. Neal, Diamond, Goldman, Klossner, Morse, Pajak, Putukin, Quandt, Sullivan, Wallack, and Welzant (2013), confirmed that psychological care outside of practice is beyond the realm of AT expertise. Recognizing AT are not qualified to assist in psychological concerns related to student-athletes seconds the need for employment of other professionals whom are qualified and easily accessible to this population. Institutions with resources for student services/development may vary depending in departmental values as well as personnel within departments.

As one of the subsections of an athletic department's academic services, student-athlete development provides a more holistic approach to the student-athlete experience. Student-athlete development programs vary from institution to institution, but according to Navarro (2018), student-athlete development programs generally center on personal enhancement, social responsibility, career development, leadership, and prepared professionalism. Personal enhancement is focused on assisting student-athletes' identity and values, well-being, transition and reflection (Navarro, 2018). These characteristics are essential to student-athletes'

experiences throughout college. As stated previously, mental health challenges are particularly present in student-athletes throughout college. As personal enhancement, specifically well-being, are part of student-athlete development programs, addressing mental health concerns fall into these programs. Also, personal development departments may address issues such as stress management, eating disorders, and athletic retirement issues (Carodine, 2001). However, an issue arises when institutions do not have development departments, or general student-athlete service departments. Institutions that are not able to fund additional subsections of departments outside of what is needed to operate daily may lack student development and services because of its intangible nature. Also, institutions within the Division II and III levels whose student services and development departments are not directly given financial support the same way Division I institutions are, may be more challenged to ensure the necessary services are being provided. Despite this nature, many schools do in some fashion provide services to assist in addressing student-athletes' mental health needs.

Evaluation and Counseling

Considering the increased number of mental health risks associated with sport participation, it is important to evaluate the role of counseling. According Heird and Steinfeldt (2013), athletic identity is used as a framework to assist in identifying how student-athletes interpret information, cope with situations, and behave in ways that are consistent with athletic culture. Due to the nature of college student identities, in this case specifically student-athletes, understanding their individual identity salience is essential to being able to assist in their needs. Identifying and understanding unique needs of student-athletes translates to the job of counseling professionals to assist them in coping and overcoming the unique set of demands they are faced with. Although sport psychologists and coaches may be some of the first individuals to identify a

student-athlete's need for mental health care, they themselves are not qualified to provide such care as it is not directly related to physical performance (Hinkle, 1994). The role of a sport counselor is described as distinctly different than a sport psychologist. According to Hinkle (1994), sport counselors provide assistance in stress and anxiety reduction, coping skills, and relaxation training. Providing the personnel to assist student-athletes in ways other than performance reinforces the NCAA's overall goal of providing a holistic experience for its student members.

The NCAA and Mental Health

In an effort to support the effect mental health has on student-athletes, the NCAA's Sport Science Institute (SSI) developed several educational models. These models include supporting student-athletes mental health, mental health best practices, campus stakeholders guide, mental health disorder fact sheets, and workshop planning kits. These entities assist in providing information on how to address the mental health of student-athletes. NCAA mental health best practices describe programing that supports and promotes student-athlete mental wellness. The NCAA's "Best Practices" model includes the following four components to support mental health: clinical licensure of practitioners providing mental health care, procedures for identification and referral of student-athletes to qualified practitioners, pre-participation mental screening, and health-promoting environments that support mental well-being and resilience revenue ("Mental health best practices", 2017). In accordance with the "best practices" model, establishing who is included in fulfilling best practice roles is essential to implementation by departments.

According to this model institutions should appoint a licensed interdisciplinary team that supports the mental wellness of student-athletes. This team is recommended to be comprised of

athletic trainers, team doctors, licensed psychologists, social workers, life skills support staff (“Mental health best practices”, 2017). Including providers in all facets of a student-athlete’s experience emphasizes the importance of their overall well-being and considers the ways in which their intersectionalities contribute to their mental health.

In addition to having qualified personnel in place to support the mental health needs of student-athletes, it is also a necessity of the “best practices” model to have appropriate protocol to manage mental health emergencies and referral. According to the NCAA development of this model, it should include appropriate education on signs and symptomatic behavior warranting mental health concerns, as well as protocol for managing mental health emergencies (“Mental health best practices”, 2017). Providing education to individuals who work with student-athletes can contribute to the reduction of stigma associated with mental health in athletics and an increase in positive student-athlete mental well-being.

Parts one and two of the NCAA’s “best practices” model are related to the intervention and care of student-athlete’s mental health, while the third practice is related to what departments can do to be proactive in support of their population’s state of mental well-being. The third entity included in the “best practices” recommendations is pre-participation mental health screening (“Mental health best practices”, 2017). As the NCAA model recommends a questioner be compiled by the primary healthcare providers and distributed to student-athletes as part of their pre-participation exam, and after the exam referrals should be made to appropriate counsel depending on the outcome of the survey (“Mental health best practices”, 2017). Although the NCAA has provided specific questions to include on the questioner, it is ultimately up to the discretion of the healthcare providers within individual departments. Providing pre-participation screening questioners offers a starting point for athletic department officials to identify where

their student-athletes require mental health support. Identification of these needs is essential to the implementation of programming.

The final consideration in the “best practices” model is a combination of the previous three elements. This consideration includes athletic departments promoting healthy environments that support resilience and mental well-being (“Mental health best practices”, 2017). One way the NCAA encourages this model is through changing the attitudes and ideas about mental healthcare in general. Suggested ways of changing these ideas are encouraging self-awareness, positive relationships with others, personal growth, and positive communication regarding mental health from student-athletes, coaches, athletic administration, and support staff (“Mental health best practices”, 2017). The suggestions above are at a cost of virtually zero, making these practices attainable for all NCAA institutions.

Considering the four recommendations made by the “best practice” model, collegiate student-athletes would immensely benefit from athletic departments implementing some, if not all of these practices. Although the NCAA has clearly defined practices and protocol to encourage and support positive student-athlete mental health, there are still several institutions that lack programming on any level.

Summary

Collegiate athletics is an environment unlike any other that provides challenges to student-athletes that are unique from the majority of the institution’s students. This unique cohort of students face exasperated stressors and an increase in situational demands because of their athletic participation. Some of the stressors student-athletes face that differ from other college students or groups of college students are injuries, maintaining academic eligibility, balancing

social and leisure activities, and time demands related to practice (Beauchemin, 2014). As a result of the extensive stressors faced by student-athletes, many participants may experience issues developing their individual identity. Athletic identity is cited to create turmoil within student-athletes because of the commitment, dedication, and demands of intercollegiate athletics, which often times results in identity foreclosure (Chartrand & Lent, 1897; Nelson, 1983; Petipas & Champagne, 1988). Departments are designed to serve this population through student-services and student development, with the help of medical staff members such as AT and team doctors. However, NCAA member schools' division levels play an important role in providing and allocating resources throughout an athletic department. As a governing body, the NCAA has taken appropriate steps to provide education and best practices to schools to increase the implementation and decrease the negative mental health effects of sport participation.

Chapter III

Introduction

In this chapter the methodology of the study is discussed along with a detailed outline of participant selection, data collection, and data analysis. The study was distributed to select professionals in collegiate athletic departments to gather information in relationship to student-athlete mental health programing and support. A one-way analysis of variance (ANOVA) and multiple regression analysis examined differences between the independent variables of NCAA division, institutional funding, and money allocated to student-athlete mental health supports and the dependent variable of number of supports provided to student-athletes . There was also a secondary one-way ANOVA examined to identify if there was a difference between categories of NCAA Division I institutions and the dependent variable of number of student supports. This analysis was conducted in an attempt to answer the question: what factors within athletic departments affect the number of mental health supports provided to student-athletes?

Methodology

Data collection consisted of a survey sent to members of the National Association of Academic and Student-Athlete Development Association and Collegiate Athletic Trainers' Society. These organizations were chosen because per the NCAA's best practices guide, student-athlete mental health falls into either the role of academics and student-development or athletic training ("Mental health best practices", 2017). The survey was designed specifically for this study to gain a better understanding of the number of ways student-athletes are supported in relationship to the effects of their intersecting identities. The study identified institution's level of mental health support and programing in relationship to their NCAA Division and funding models. Multiple regression and one-way ANOVAs were used to interpret the quantitative data.

Study Design

The research method used in this study was quantitative, with three independent variables examined. Sampling of the population took place over a broad, random scope of administration within Division I, II, and III athletic departments. The dependent variable of this study was the number of supports provided to student-athletes within athletic departments. There were three independent variables included in the data collection. The independent variables included NCAA division, institutional funding, and money allocated to student-athlete supports. The independent variables described potential impacts to the number of mental health supports provided to student-athletes through athletic departments.

The null hypothesis was:

Ho: There is no difference of institutional variables and the number of mental health supports provided to student-athletes within athletic departments.

H_a: There is a difference of institutional variables and the number of mental health supports provided to student-athletes within athletic departments.

The statistical analysis used for this project was one-way ANOVA and multiple regression analysis due to its function with multiple independent variables. A one-way ANOVA analysis is “used to determine whether there are any statistically significant differences between the means of dependent variables based on two or more independent variables” (“One-way ANOVA”, 2018). Multiple regression analyses determines the association between one or more independent variable with the dependent variable (Sheposh and Richard, 2018). The use of this type of analysis targeted which variables of NCAA division, institutional funding, and money allocated to student-athlete supports impact mental health programing within athletic

departments. Multiple regression analysis also allows for conclusions that are more accurate by examining several factors influencing mental health programming, rather than drawing a partial correlation based on one independent variable. Multiple regression analysis was used to understand the association between the three independent variables, as well as assist in identifying if there is a stronger relationship between one independent variable and the outcome than other independent variables and the outcome.

Participants

To address the research questions the potential participant pool was identified as the National Association of Academic and Student-Athlete Development Professionals (N4A) and the National Athletic Trainers' Association (NATA). Members of N4A include practitioners who are dedicated to the academic and personal development of student-athletes, and are associated to the professional group by submitting yearly dues. This professional association is comprised of over 15,000 professionals who identify their values as ethics and integrity, diversity, equity, inclusion, professional development, retention, and service ("About N4A", 2019). N4A provides student-athlete service professionals with opportunities to connect and learn from other professionals within the organization at professional development conferences and seminars. Members of this organization also have free access to the member listserv, notifying members of questions, surveys, and job opportunities related to the profession. Similarly to N4A, NATA serves student-athletes physically in a variety of ways. Members of this organization are tasked with assisting in the health and safety of student-athletes before, during, and after participation by helping them prepare and recover from sport related participation. NATA is comprised of over 44,000 athletic training professionals that pay yearly dues to be members of the association ("Membership", 2019). Ultimately, members of NATA were omitted from the survey

distribution because of the inability to access the member listserv free of charge. Both of these organizations serve as the professional networks of collegiate student-athlete academic, development, and athletic training professionals.

This study used Qualtrics surveying software as the distribution instrument used for this study; and was set to remove any identifiable information of participants. A message with a connecting link to the survey was sent through N4A’s listserv to athletic administration professionals whom are members of the organization, as well as confirmation of consent within the message. The questions included in the survey related to the participants’ athletic department’s student-athlete mental health support programs. In order to maintain participants’ privacy, their name and name of the institution they represent was not included in the survey questions. In total only 1% of the N4A population responded to this study. The table below represents the number of respondents per division.

Table 1

<i>NCAA Division</i>	N
Division I FBS Autonomy	54
Division I FBS Non-Autonomy	23
FCS	37
Non-Football	22
Division II	11
Division III	2
None	1

Procedure

The survey was comprised of sixteen total questions related to a variety of different factors that affect support programs for student-athlete mental health within athletic departments. The number of supports provided by athletic departments is the dependent variable of this study.

The number of supports provided was determined as the dependent variable by asking ten nominal, dichotomous questions (see Appendix 1). Categories of services, development, and wellness were comprised of questions seven through sixteen to give a numeric value to the dependent variable of number of supports provided. Questions categorized into services included questions ten, eleven, and fourteen. Questions categorized into development included seven, thirteen, and fifteen. Questions categorized into wellness included questions eight, nine, twelve, and sixteen. The respondents' answer to these questions, yes or no, determined if a support is available to student-athletes. This study identified three independent variables of NCAA division, institutional funding, and money allocated to student-athlete supports. Questions one, three, and four identified the independent variables of the study.

Validation of the study took place through a pilot study distributed to ten higher education professionals. These professionals consisted of assistant professors, athletic academic advisors, and academic coaching for excellence staff members. The varying titles of the pilot participants insured the survey questions were easily understood to someone who may or may not have a background in collegiate athletics. The survey questions identified what NCAA Division employed the participant, if they were Division I what tier, as well as yes and no answers regarding athletic departments funding and supports provided to student-athletes in relationship to mental health. There was a question to specifically identify the participant's role within an athletic department; as well as a question to expand on further explanation of a service. Further explanation was asked for to help understand resource allocation within athletic departments. These questions are essential to better understand what services are being provided, as well as the adequacy of these services compared to the proven needs throughout the student-athlete population.

The survey was distributed electronically approximately nine weeks into the spring semester and open for respondents for a total of nine days. After the first four days the survey was open, an additional link and reminder went out to members of the listserv. This additional link was to a separate survey document. After the data collection period ended, both surveys were exported from Qualtrics to the Statistical Package for Social Sciences (SPSS). One comprehensive set of data was determined by combing the two data sets in SPSS after exportation from Qualtrics. There were 131 respondents to the first survey link and 37 respondents to the second survey link, to get a total of 168 participants. Of the 168 total surveys, 18 surveys were eliminated from the data set due to showing a “null” response because of incompleteness for 150 total clean responses. A one-way ANOVA analyzed the difference between institutions’ number of supports and NCAA divisions. A multiple regression model analyzed the association between the number of supports provided and independent variables of institutional funding and money allocated to student-athlete supports.

Chapter IV

Results

Introduction

The identity of a student-athlete is challenged by the dual role of being a college student and a collegiate athlete. The purpose of this study was to identify if the independent variables of NCAA Division, institutional funding, and money allocated to student-athlete supports impacted the dependent variable of the number of student-athlete mental health supports provided within athletic departments. The null hypothesis of this study was that there is no difference between institutional variables and the number of supports provided to student-athletes within athletic departments. NCAA Division I employees represented the majority of the respondent sample size; with a variety of Division I subdivision's represented. The dependent variable as number of supports provided was categorized into questions related to services, development, or wellness on the survey distributed to participants. Questions categorized as a services related to department's employment of professionals who are able to serve the mental health needs and concerns of student-athletes. Development questions related to the holistic support and development outside of their required sport participation. The third category of support was wellness. Questions related to wellness identified if any measures were taking place within athletic departments to monitor or refer student-athletes to mental health personnel or resources. These categories were determined to answer the identified research question of what factors within athletic departments affect the number of mental health supports provided to student-athletes?

Preliminary Analysis

The results of this study consisted of 150 total survey responses. An analysis of the results took place using multiple regression and one-way ANOVA analyses using the Stastical Package for the Social Sciences (SPSS) software. Multiple regression analysis assumes the measures of central tendency are represented by values that are not extreme in order to make assumptions about two or more groups as these measures are identified as representative values (Mishra, Singh, Gupta, Sahu, & Keshri, 2019). Another assumption made by multiple regression analysis is the dataset's skewness will equal 0, indicating symmetry between the mean, median, and mode (Mishra et.al. 2019). Multiple regression analyses assume the dataset has normal distributions as non-normally distributed data can distort relationships (Osborne & Waters, 2002). Normality within a data set is defined by little variance between the measures of central tendency. The second statistical analysis used in this study was a one-way ANOVA analysis. One-way ANOVA analysis assumes the dependent variable is normally distributed, there is homogeneity of variance, and the independence of observations ("One-way ANOVA, 2018). The measures used to interpret the data isolated the independent variables to draw conclusions regarding the number of supports provided.

Dependent Variable Characteristics

The statistical analysis of the dependent variable found the central distributions to have a mean of 6.78, median of 7.00, and mode of 6, indicating a close to equal distribution. The data sets skewness was indicated as -.059. The highest number of supports provided indicated to be 6 with 34 (22.7%) of the respondents indicated their respective institution allocated 6 supports within the athletic department to student-athlete mental health (See Table 2).

Table 2

Number of Supports Provided

Number of Supports	Frequency	%	Cumulative %
2	1	0.7	0.7
3	1	0.7	1.3
4	10	6.7	8.0
5	23	15.3	23.3
6	34	22.7	46.0
7	27	18.0	64.0
8	29	19.3	83.3
9	18	12.0	95.3
10	7	4.7	100.0

Questions seven, thirteen, and fifteen described support programs dedicated to student-athlete development. The development category asked questions to determine if the participant's athletic department provides programs to support the development of student-athletes. A total of 98.7% of participants reported to support student-athletes outside of their sport commitments (See Table 3).

Table 3

Question 7- Outside Respective Sport Commitments

Valid	Frequency	%	Valid Percent	Cumulative %
Yes	148	98.7	98.7	98.7
No	2	1.3	1.3	100
Total	150	100	100	

The second question in the development category was number thirteen, which described whether or not athletic department personnel informed student-athletes of positive mental health practices. A total of 86% of the participants reported to inform student-athletes of positive mental health practices (See Table 4).

Table 4

Question 13-Informs Student-Athletes of Positive Mental Health Practices

Valid	Frequency	%	Valid Percent	Cumulative %
Yes	129	86.0	86.0	86.0
No	21	14.0	14.0	100
Total	150	100	100	

Question fifteen was the third and final question used in the development category to determine if athletic departments at the participant’s institutions required student-athletes to attend workshops regarding mental health. A total of 38.7% of respondents reported that their respective athletic departments mandated student-athlete attendance to workshops regarding mental health (See Table 5).

Table 5

Question 15-Required to Attend Workshops Regarding Mental Health

Valid	Frequency	%	Valid Percent	Cumulative %
Yes	58	38.7	38.7	39.3

No	91	60.7	60.7	100
Total	150	100	100	

The second set of coded questions determined the number of supports offered by the respondent's athletic departments regarding student-athlete wellness. Questions eight, nine, twelve, and sixteen were asked to identify whether or not athletic departments support student-athlete mind and body wellness. Question nine in the wellness category investigated whether or not personnel within the participant's athletic department refer student-athletes to campus psychological resources when appropriate. A total of 98.7% of respondents reported to refer student-athletes to campus psychological resources when appropriate (See Table 6).

Table 6

Question 9-Refer to Campus Psychological Resources when Appropriate

Valid	Frequency	%	Valid Percent	Cumulative %
Yes	148	98.7	98.7	98.7
No	2	1.3	1.3	100
Total	150	100	100	

Question twelve asked whether or not athletic department personnel refer student-athletes to campus athletic training resources. Of the total participants, 60% replied that athletic department personnel do refer student-athletes to campus athletic training resources (See Table 7).

Table 7

Question 12-Refer to Campus Athletic Training Resources when Appropriate

Valid	Frequency	%	Valid Percent	Cumulative %
Yes	90	60.0	60.0	60.0
No	60	40.0	40.0	100
Total	150	100	100	

The third question coded into the wellness category was question sixteen. This question asked if certified mental health practitioners regularly monitor student-athlete mental health. Of the 150 total number of participants, 148 answered the question. 59% of participants confirmed that certified mental health practitioners regularly monitored student-athlete’s mental health (See Table 8).

Table 8

Question 16-Certified Mental Health Regularly Monitor

Valid	Frequency	%	Valid Percent	Cumulative %
No Response	2	1.3	1.3	1.3
Yes	59	39.3	39.3	39.3
No	89	59.3	59.3	59.3
Total	150	100	100	

The fourth and final question coded in the wellness category was question eight. This question assessed if the respondents institutions’ athletic departments examined student-athlete’s

mental health at the beginning of each school year. The results of question eight reported that 45% of the respondent’s institutions examined student-athlete’s mental health at the beginning of each school year. Of the sample, three participants opted not to record an answer to question eight (See Table 8).

Table 9

Question 8- Mental Health is Examined at Beginning of Each Year

Valid	Frequency	%	Valid Percent	Cumulative %
No Response	3	2.0	2.0	2.0
Yes	45	30.0	30.0	33.0
No	102	68.0	68.0	100.0
Total	150	100	100	

The third category, questions seven through sixteen, was services provided to support student-athlete mental health. The questions in this category were developed to identify if the represented institutions provide services within the athletic department that support student-athlete mental health. Question eleven identified the service of athletic training within athletic departments. All 150 of participants indicated their respective athletic departments provide services by qualified athletic trainers (See Table 9).

Table 10

Question 11- Employs Qualified Athletic Trainers

Valid	Frequency	%	Valid Percent	Cumulative %
Yes	150	100.0	100.0	100.0

Question fourteen asked if the participant’s athletic departments provided workshops regarding mental health. Responses from participants indicated that 69.3% of institutions represented do provide workshops for student-athletes regarding mental health (See Table 10).

Table 11

Question 14- Provide Workshops Regarding Mental Health

Valid	Frequency	%	Valid Percent	Cumulative %
No Response	1	0.7	0.7	0.7
Yes	104	69.3	69.3	70.0
No	45	30.0	30.0	100.0
Total	150	100	100	

The third and final question in the support services available asked whether or not athletic departments employed qualified psychological counseling professionals. The percentage respondents whose athletic departments did employ qualified psychological counseling professionals was 57.3% (See Table 11).

Table 12

Question 10- Employs Qualified Psychological Counseling Professionals

Valid	Frequency	%	Valid Percent	Cumulative %
Yes	104	69.3	69.3	70.0
No	45	30.0	30.0	100.0
Total	150	100	100	

The results of the dependent variable's categorical analysis represent a clear distinction between the number of supports provided and the mental health of student-athletes. The majority of participants reported "no" to four of the five questions asked directly about supports offered related to the mental health of student-athletes.

One-Way ANOVA Analyses

NCAA Division

The first one-way ANOVA analyzed the difference between the mean number of supports provided student-athletes based on NCAA Division as reported by participants. NCAA Division was identified as Division I, II, or III. The data set was consistent with one-way ANOVA's assumptions of central tendency and homogeneity as there was minimal variance between these measures. A statistical significance was found between the independent variable of NCAA division and the dependent variable of number of supports provided ($F(3, 146)=2.937$, $p=.035$). This statistical significance indicated that NCAA Division rejected the null hypothesis that there is not relationship between institutional variables and the number of mental health supports provided to student-athletes within athletic departments. The one-way ANOVA analysis indicated differences between NCAA Division and the number of supports provided (See Table 13).

Table 13

Question 1- NCAA Division

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	23.544	3	7.848	2.937	.035
Within Groups	390.196	146	2.673		
Total	413.740	149			

Note. Significant at $p < .05$

Division I-Secondary Analysis

Due to there being a greater number of Division I institutions represented in the dataset, a secondary one-way ANOVA analysis was run to differences of Division I categories on the number of supports provided. The measures of central tendency indicated normality of distribution as well as close to equal homogeneity. Question two of the survey distributed identified if a participants' institution was categorized as FBS Autonomy, FBS Non-Autonomy, FCS, Non-Football, or none. The total number of participants that answered question two was 137. The one-way ANOVA results indicated a statistical significance between the number of supports provided and the categorization of Division I institutions ($F=(2, 147)=5.270, p=.006$) (See Table 14). This statistical significance indicates that there are varying degrees of mental health supports provided to student-athletes within the four subcategories of Division I institutions.

Table 14

Question 2- Division I Subdivision

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	48.647	4	12.162	4.999	.0001
Within Groups	321.149	132	2.433		
Total	369.796	136			

Note. Significant at $p < .05$

Multiple Regression

Institutional Funding and Money Allocation

The predictor variables of institutional funding and money allocated to student-athlete supports were identified in questions three and four, respectively, of the survey distributed to participants. These predictor variables were found to have normal distributions measures of central tendency. The combination of the dependent variable and two predictor variables were statistically significant ($p = .006$). Further analysis indicated financial aid alone was not statistically significant ($p = .47$), but money allocated to supports was statistically significant at $p = .003$ (See Table 15). The two predictor variables combined indicated that financial aid and money allocation play a role in the number of mental health supports provided to student-athletes. However, when only assessing financial aid and its relationship to the number of supports, the analysis indicated that financial aid does not play a role in the number of mental health supports provided to student-athletes. Dissimilarly, money allocation does have a significant impact on the number of supports provided to student-athletes in relationship to mental health.

Table 15

Summary of Number of Supports Multiple Regression (N=150)

Variable	Model 1				
	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>p</i>
Constant	9.813	0.991	7.848	9.903	0.000
Financial Aid	-0.431	0.595	-0.058	-0.724	0.470
Money Allocated	-2.512	0.830	-0.244	-3.027	0.003

* α -.05

Summary

The results of the one-way ANOVA indicated a significant difference in number of supports provided between NCAA Divisions, rejecting the null hypothesis. The multiple regression analysis indicated a statistically significant association between both federal financial aid distribution and money allocated and the number of supports provided. Regressing the analysis to target only federal financial indicated that it was not a factor in the number of mental health supports provided. Taking the second predictor variable and regressing it showed a statistical significant between money allocated and the number of supports provided.

As previously discussed, NCAA divisions receive an allotment of money based on their classification. The results of this study indicate the use of this money is not standardized within each divisional categorization. Although mental health support is under the supervision of athletic academic support departments, including student-athlete development, and student-athlete development, the results of this study indicated that the interpretation of adequate support is up to the discretion of the institution and department. There was a significant difference between participants’ responses of questions that asked if supports were “provided” versus if

supports were “required”. Of the survey questions that indicated a service was provided, the majority of the responses indicated “yes”. Dissimilarly, “no” was the indicated response by participants when asked if student-athletes were required to participate in particular mental health supports.

Chapter V

Discussion

Summary

Student-athletes' college experience is unique in they have a shared identity between being a student and an athlete. The NCAA regulates certain parts of its member institutions, while other aspects of these institutions are individualistic. The study conducted above identifies individual differences between institutions that may affect the number of mental health supports provided to student-athletes within athletic departments. The null hypothesis is identified as no relationship between institutional variables and the number of mental health supports provided to student-athletes within athletic departments. Using the number of supports provided as the dependent variable, the survey concluded that there are a varying number of supports provided among the institutions represented. Also, the independent variables of NCAA Division and money allocated were both found to have a significant statistical correlation to the number of supports provided by institutions; whereas federal financial aid did not have a statistical significance on the number of mental health supports provided to student-athletes. Although the NCAA strives to create a culture that benefits student-athletes holistically, the study above reveals inconsistencies between NCAA best practices and the number if institution's that provide and require mental health supports to their student-athletes.

Interpretation of Findings

Collegiate student-athletes are tasked with managing a dual role on college campuses and faced with unique opportunities and stressors as a result of their participation. This population is granted a number of resources to support the challenging dual role of being a student-athlete. The

study presented about examined differences between NCAA institutions and the number of mental health supports allotted to student-athletes. In 2016, the NCAA distributed over a billion dollars to member institutions among all three divisions (“Where does the money go?”, 2016). Previous research on student-athlete mental health reported that 10-15% of student-athletes experience mental health issues that warrant psychological evaluation (Kaier et.al., 2015); yet the study presented above indicated that only 45 of 150 participants institutions examine the mental health of student-athletes at the beginning of each school year. Similarly, only 59 of 150 represented institutions have certified mental health practitioners who regularly monitor the mental health of student-athletes. According to the NCAA revenue distributions, student-athlete wellness is supported through the academic enhancement and student assistance funds (Where does the money go?”, 2018). Although student-athlete wellness is specifically covered by these funds, there is a proven lack of consistency among member institutions.

Athletic culture and mental health stigma impact the experiences of student-athletes in that they can be tied to member athletic departments either implementing and allocating necessary resources or not. Previous research identified the experiences of student-athletes as more positive when their respective teams and athletic departments encouraged health-seeking behaviors (Kroshus, 2014). While the current study identified the majority of athletic departments to either refer student-athletes to mental health services, or employ certified mental health practitioners, there is a noticeable discrepancy between concrete ambiguous supports offered by athletic departments to student-athletes. This discrepancy calls for a reevaluation of the standard of practice when evaluating institutions support of student-athlete wellness in relationship to the money specifically distributed for such needs.

The discrepancy of supports provided between NCAA divisions that receive equal money can point to athletic department culture as the underlying culprit of such discrepancies. Not only are the supporting entities inconsistent, but also comparing physical support to mental support is also drastically different. The survey revealed that each of the 150 represented athletic departments housed athletic training services for student-athletes. While these services are essential for student-athletes' continued sport participation, it is also astounding that the number of mental health supports is vastly different. Even with known exasperated stressors that result from collegiate participation, the culture of athletic departments seems to take an unstandardized support approach. Due to each NCAA member institutions receiving funds related to student-athlete supports, the inconsistencies in the number of supports provided seem to be a result of the department's values and culture. As the NCAA encourages providing a holistic student-athlete experience, the inconsistency between physical and mental health supports directly conflicts the holistic goals of the NCAA.

It is important to understand the gap between the need for mental health services among college student-athletes and the support that is currently being offered by athletic departments. As student-athletes dedicate the majority of their college experience to representing their respective institution, they are also facing unique challenges in silence. Athletic departments offering a consistent number and type of mental health supports to student-athletes is significant in cultivating a positive culture and experience for students that represent institutions on a national stage. To ignore or provide inadequate mental health supports to student-athletes who experience exasperated stress as a result of athletic participation is negligent of the people in power. Not only is it significant for student-athletes to be supported for their own well being, but supporting their mental health will likely result in a more positive athletic performance.

Implications for Practice

Previous research has identified differences among the student-athlete population and their mental health in comparison to their non-athlete peers. Eisenberg and colleagues (2009) reported that about three quarters of mental health disorders surface by the age of 24. Although student-athletes are identified as being more likely to experience mental health issues that call for psychological evaluation (Kaier et.al., 2015), the findings of this study indicate that although this population is more likely to experience poor mental health, athletic departments are not actively mandating positive mental health practices. Although most of the respondents indicated a positive relationship between supports provided to student-athletes outside of their sport commitments, when asked if an evaluation takes place at the beginning of each school year or if they were required to attend mental health workshops, the majority of the respondents indicated their respective departments did not. Considering challenges student-athletes face because of their dual identities as a student and an athlete and the results found in the study presented is call for concern among athletic department personnel. One of the contributing factors to a student-athlete's college experience is their exo and macro systems. These systems influence the environment of a student-athlete by the culture and attitudes of its members. As an exosystem, college athletic departments influence student-athletes by the culture creating within that system. Although the results showed that most participants referred student-athletes to campus counseling resources, previous research by Kaiser (2015) indicated this referral to affect the likelihood of student-athletes using said services because of the public nature. Drawing upon previous research and the public nature of campus mental health resources, a conclusion can be drawn that student-athletes would benefit from an appropriate, athletic department position solely dedicated to mental health practices. The culture of athletic departments could potentially

perpetuate the characteristics of athletic stigma if members of the department do not intentionally, visibly support the mental health of student-athletes. The awareness of the need to support student-athlete mental health that is shown through previous research, is a blatant disregard of supporting behavior.

Additionally, the amount of revenue generated and redistributed to NCAA member institutions provides insight as to the emphasis, or lack thereof, on positive mental health behaviors. The categories of NCAA revenue distribution illustrate a discrepancy between services provided to assist student-athletes outside of their sport commitments and those that benefit athletic competition. Of the almost billion dollars generated by the NCAA, institutions only allocated about \$75,000,000 to initiatives outside of performance related categories (“Where does the money go?”, 2018). The dataset of this study found a statistical significance difference between NCAA Division and the number of supports provided. This finding is indicative of the varying amount of money allocated to the respective divisions. The rejection of the null hypothesis in relationship to NCAA division calls for an evaluation of where the millions of dollars are going if they are not being allocated to supports that could reduce negative mental health effects and stigma amongst student-athletes.

While NCAA division was a positive predictor of the number of supports provided, institutions that receive federal funding were not found to have a statistically significant relationship to the number of mental health supports provided by athletic departments to student-athletes. This finding, compared to NCAA divisional money allocation, made it possible to draw the conclusion that athletic departments generally do not rely on federal funding to implement support entities for student-athletes.

One of the most astounding findings of the present study is the conclusion that is drawn from evaluating stress, depression, and anxiety and the questions regarding consistent, required mental health initiatives within athletic departments. Beauchemin (2014), describes student-athletes to have a greater number of stressors because of their sport participation. Some of the stressors included in previous research include maintaining eligibility with full course loads, balancing social and leisure activities, interpersonal challenges, media stereotypes, and physical stress and fatigue (Brewer & Petrie, 2014). The explicit, uniquely independent stressors resulting from collegiate athletic participation can be assumed to solicit support entities within athletic departments, as they are the overarching figure of student-athletes' collegiate experience. In relationship to supporting these unique stressors, athletic department personnel responded to survey questions inquiring about the monitoring of student-athlete's mental health, and if they are provided opportunities to attend mental health support programs. Even though previous research indicated student-athletes face challenges that provide additional mental health struggles, the results of the survey indicated that most of the athletic departments represented do not mandate mental health workshops or examine student-athletes mental health at the beginning of each school year. These findings accentuate the lack of emphasis within athletic departments regarding their student-athlete's mental health.

Limitations

One of the limitations of this study is the period of time the survey was available for respondents. Due to the timing of the survey distribution, it was only open for a total of 9 days. If the survey was available for responses longer than the allotted time period it is possible the data could have changed due to the number of respondents. The short data collection period could also have affected the unequal representation of all three NCAA division. A dominant number of

divisions represented by the dataset impede the ability to draw conclusions related to the number of supports provided and NCAA division.

Another possible limitation of this study could be confusion in wording or lack of knowledge of department resources by athletic department personnel. Respondents could have potentially been unaware of supports provided due to their role in the department, which in turn would have impacted the data findings.

Future Research

There are extensive possibilities for future research on the number of athletic departments supports offered to student-athletes regarding mental health. Future research has the potential to further investigate the reason participants answered no to any of the nominal dichotomous questions asked in relationship to the dependent variable. Also, future researchers could inquire if an institution found to have a high number of supports provided had a previous issue or tragedy within their student-athlete population to solicit an above average number of mental health supports provided. Additionally, research could expand further into Division II and III institutions to strengthen the results found in the current study. Involving student-athletes in the data collection could also be included in further research to gain insight into their perception of the adequacy of the number of supports provided within athletic departments. Future research could also evaluate the impact of culture of the number of supports provided. Previously, research has identified athletic culture as an inhibiting factor of student-athletes to seek mental health support. It may be beneficial to identify if there are commonalities between departments that offer a low number of services versus departments that offer a higher number of services within the same NCAA Division. Factors that could potentially affect this include the leadership of the athletic department and their views on mental health and the student-athlete experience.

Also, future research could also attempt to identify if there are particular characteristics of athletic department leadership such as gender, race, ethnicity, or age, and its correlation to the number and type of mental health supports provided.

Conclusion

The findings of the present study expand on previous research in relationship to collegiate student-athlete mental health. The dataset contributes to understanding which NCAA divisions are funding a higher number of supports than others. It also identifies a gap between the proven needs of student-athletes and the types of resources that are available to them. The findings of this study point to federal funding having the least impact on whether an athletic department provides any number of supports related to the mental health of student-athletes. NCAA division, subdivision, and money allocation play the most critical roles in the number of mental health supports provided to student-athletes.

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Appendix A: Survey

1. Athletics at your institution compete as NCAA Division:
 - a. I
 - b. II
 - c. III
2. Athletics at your institution competes as Division I:
 - a. FBS Autonomy
 - b. FBS Non-Autonomy
 - c. FCS
 - d. Non-Football

- e. None
- 3. Your institution receives federal financial aid?
 - a. Yes
 - b. No
- 4. Your institution's athletic conference allocates money to student-athlete services/development/wellness?
 - a. Yes
 - b. No
- 5. What department applies to you?
 - a. Athletic Training
 - b. Athletic Academic Services
 - c. Student-Athlete Development
 - d. Compliance
 - e. Administration
 - f. Other
 - i. Please Specify
- 6. What is your job title?
 - a.
- 7. Your institution supports the development of student-athletes outside of their respective sport commitments?
 - a. Yes
 - b. No
- 8. Student-athletes' mental health is examined at the beginning of each school year?
 - a. Yes
 - b. No
- 9. Athletic department personnel refer student-athletes to campus psychological counseling resources when appropriate?
 - a. Yes
 - b. No
- 10. The athletic department employs qualified psychological counseling professionals?
 - a. Yes
 - b. No
- 11. The athletic department employs qualified athletic trainers?
 - a. Yes
 - b. No
- 12. Athletic department personnel refer student-athletes to campus athletic training resources?
 - a. Yes
 - b. No
- 13. Your role in the athletic department informs student-athletes of positive mental health practices?
 - a. Yes
 - b. No
- 14. Athletic department personnel provide workshops regarding mental health?
 - a. Yes
 - b. No

15. Student-athletes are required to attend workshops regarding mental health?
 - a. Yes
 - b. No
16. Certified mental health practitioners regularly monitor student-athletes' mental health?
 - a. Yes
 - b. No