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Student-Athlete Perceptions of Stress, Support,

and Seeking Mental Health Services

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Due to several factors, intercollegiate student-athletes have more demands on their time than ever before. Many feel they have more than a full-time job when one considers the academic and athletic expectations. In addition to these two facets, one must also consider external aspects including family and social life, and for some athletes, employment. Given these factors, student athlete mental health is a real concern. The current study surveyed 158 Division I athletes from four universities seeking to explore perceptions of stress, coping mechanisms, support from coaches and some athletic department personnel, and the stigma of seeking help. The results indicated student-athletes perceive stress impacting their daily life, but in different forms. Student-athletes were also more likely to seek help from non-team support staff than coaches and team-related support staff, and in general, perceived teammates who sought mental health treatment more positively than their perception of how their teammate would treat other teammates. The theoretical and practical implications of these results were discussed as were limitations and areas for future research.

Keywords: college student-athletes, mental health, anxiety, stress

Over the last decade collegiate stakeholders have begun to focus on more than just athletic performance, as the mental well-being of student-athletes (SAs) has garnered more attention. This could be due to several factors, but certainly the increasingly publicized SA suicides, like the University of Pennsylvania's track and field athlete, Madison Holleran and more recently, Washington State's quarterback Tyler Hilinski, have shined a light on the struggles of collegiate athletes beyond their on-field performance and academics. In addition, up to 33%, or 148,500, of SAs experience symptoms of depression (Cox, 2015; Wolanin, Hong, Marks, Panchoo, & Gross, 2015). Goldman (2014) found that anxiety disorders among student-athletes are reported by approximately 85% of certified athletic trainers (Goldman, 2014). Eating disorders in male athletes vary from 0–19% and in female athletes 6–45% according to Bratland-Sanda and Sundgot-Borgen (2013), and approximately 50% of male athletes and 34.5% of female athlete's report binge drinking (Brenner & Swanik, 2007). Finally, Brain Hainline, the Chief of the Sport Science Institute, attended the NCAA national convention in 2013 to focus on SA concussions; he left, however, wondering how his organization could better support the mental health of SAs, as it was clearly the predominant concern of the NCAAs Student Athlete Advisory Council (Burnsed, 2013).

Taken together, the convergence of these factors have put athletic administrators in a position to consider what mental health supports they are providing to their athletes, and it is not a simple exercise to examine SAs, as they are a highly protected group on campus. Athletic departments and coaches closely monitor how much time athletes give to activities beyond their usual responsibilities, such as research initiatives. Perhaps more importantly, athletic department administrators are protective of their departments' reputations should the results be less than glowing. Much like corporations most athletic departments need to protect the bottom line, as the predominant responsibility of the Athletic Director (AD) is fundraising and financial stability (Kirkpatrick, 2018). Michael Stoner's blog post (2018) in *Inside Higher Ed* wrote of the "reputation hit" should an athletic department be forced to deal with a scandal, "Scandals that emerge within an institution, and are shared on social media, have an impact on institutional stakeholders. But those that find their way into mainstream media can cause serious financial damage" (para. 9). As a result, to understand and prevent future tragedies there has been an uptick in research on various aspects of SAs and mental health. Considering the research topic is still growing, there is an opportunity to learn more about SAs perceptions of mental health issues and mental health services. Thus, any chance to reach this population and explore these important topics is valuable.

For the general public, the SA experience is often romanticized. There is a perception that SAs are showered with praise and benefits while receiving good grades by taking easy classes. This may have been true at one time, and a few SAs may still receive this treatment, but for a majority of athletes, their college experience is a grind. For instance, they face athletic performance scrutiny from fans, coaches, and peers. Unfortunately, they are also under significant time demands to complete all their necessary academic and athletic responsibilities (Kihl, Richardson, & Campisi, 2008). According to the NCAA GOALS (2016) report, athletes perceive an increased demand for their time due to athletics and academics. More time spent on academics and athletics suggests less time to recover, decompress, and less time to focus on healthy habits such as sleep and nutrition.

Due to increased expectations and time demands, athletes often forfeit their ability to make their own decisions to coaches and administrators as a means to easing their stress of making the wrong choice, for example clustering classes (Fountain & Finley, 2011). As a result, their time is often so structured and programmed that they barely have time to be a college student, much less find any sense of life balance by spending time with friends and important loved ones (Watson & Kissinger, 2007). With this lack of balance, it is understandable they are struggling with mental health issues. Dean and Rowan (2014) highlighted numerous issues that attribute to the mental health vulnerability of the SAs. They include pressure to perform, pressure to hide physical injuries, undiagnosed mental disorders, substance abuse, prevalence of eating disorders in female athletes, poor support systems, and pressure to be role models.

While these issues may be easy for researchers to identify, SAs often have limited mental health literacy. That is, SAs are generally unable to recognize clinical forms of anxiety and stress (Kim, Saw, & Zane, 2015). In addition, identifying the mental health issues is only part of the equation. SAs often do not seek mental services despite known problems (Moreland, Coxe, & Yang, 2017). Several barriers have been hypothesized, but due to the protective nature of SAs, there are few studies addressing perceptions of seeking mental health support. Moreland et al. (2017) reviewed both facilitators and barriers to SAs seeking mental health services and found the following constraints: attitudes of numerous athletic stakeholders, gender bias, lack of mental health resources, lack of time, lack of mental health knowledge, and proper institutional protocols. An additional barrier is student-athlete perceptions of media outlets. SAs reported that media played a role in whether they would seek mental health assistance, they felt media members and the potential reaction would compound and intensify the experience (Gulliver, Griffiths, & Christenson, 2012).

Athletic departments and universities, as a whole, are beginning to slowly invest their limited resources in mental health facilities, personnel, and services (Carter, 2019). However, when the topic is taboo among the population, it is not enough to just provide resources (Simmie & Nunes, 2012). It is also important to educate individuals on both the warning signs of mental health disorders and the mental health services available. However, before we can educate, we must first clearly understand the perceptions associated with mental health literacy and the process of seeking mental health services. This important information could provide coaches, athletic administrators, and counselors with data to ensure they are providing the correct services, pathways to the services, and, more importantly, the ability to engage SAs about potential mental health behaviors.

Given these challenges and opportunities for research, the purpose of the current study was threefold: (1) to determine in what ways do SAs experience and cope with stress, (2) to explore SA perceptions of coaches and support staff as mental health advocates, and (3) to examine differences in self-perception and perceptions of teammates as it relates to seeking mental health services. The following research questions were specifically devised to guide the study:

RQ 1: To what extent are there differences in types of stress experienced and coping mechanisms used by SAs?

RQ 2: To what extent are there differences in a SA's likelihood to seek help from coaching staff, team support personnel and non-team support services?

RQ 3: To what extent does using team and non-team related personnel to support mental health impact a SA's ability to manage stress?

RQ 4: Are there differences between an SA's perception of fellow athletes seeking mental health treatment and their perception of how their teammates would respond to fellow athletes seeking mental health treatment?

Review of Literature

As previously mentioned, life as a modern college athlete is challenging. According to the NCAA GOALS (2016) report, 30% of SA's stated they were severely overwhelmed by their responsibilities in the previous month. Another 33% report struggling to perform other tasks outside of their sport due to the physical demands of the athlete status. Each year the GOALS survey is published, it provides further evidence of the increased challenges facing SAs. For instance, academic and athletic demands have resulted in less time to socialize or create relationships outside the athletic department. This can lead to isolation from the greater campus (Martin, 2008). Despite this isolation, SAs still have the academic expectations of a traditional college student and have to balance these with practice, mandatory study halls, travel, and competition.

Athletes perceive greater amounts of stress due to the lack of control they have in their lives (Watson, 2016). Watson and Kissinger (2007) compared the self-reported wellness of SAs and non-athletes and found that non-athletes reported higher levels of wellness with regard to social self and essential self. One's social self can be defined in several ways, but it generally refers to how humans interpret and make choices based on how others perceive our past behaviors or what we may do in the future. While essential self refers to what we know intrinsically about ourselves. Our personal identity is created by our gender, culture, and spirituality. To help explain this difference, Watson and Kissinger (2007) suggested SAs lack the time to cultivate social relationships outside of sports. This stress and low level of wellness is not without consequence. Burnout is a real problem for athletes (Roxas & Ridinger, 2016); thus, it is important to understand what types of stress SAs are experiencing and what coping mechanisms they are using.

Student-Athlete Stress and Coping Mechanisms

With intercollegiate SAs managing numerous additional responsibilities, they are also managing increased levels of stress and anxiety. There are numerous factors contributing to their stress related to their athletics: the aforementioned time demands, as well as dealing with conflict with coaches, team dynamics and fear of loss of play by injury or redshirting (Wilson & Pritchard, 2005). In an NCAA data-mining study, Hwang and Choi (2016) found academic anxiety was the most substantial predictor of perceived stress while coaching dynamics and team environment were second. In a Turkish study of college athletes and non-athletes, it was found that athletes had higher levels of depression, anxiety, and psychological stress than non-athletes (Demirel, 2016). Li, Moreland, Peek-Asa, and Yang (2017) found that SAs that suffered from preseason anxiety had a statistically significant chance to experience an injury during their season. Mann, Bryant, Johnstone, Ivey, and Sayers (2016) examined the relationship between

periods of high physical stress and high academic stress and the increased chance of experiencing injury during college football season. The authors also found with increased periods of high academic stress, injuries more than doubled compared to periods of low academic stress. Stress and anxiety, regardless of the context, is unhealthy for an individual.

Coping mechanisms. Beyond types of stress, a concern for stakeholders is how SAs are coping with stress and anxiety. Eating disorders were reported in male and female athletes (Bratland-Sanda & Sundgot-Borgen, 2013), but vary by sport and the school attended. At risk alcohol behavior was also uncovered by researchers Brenner and Swanik's (2007), as they found 75% of college athletes self-reported high-risk drinking (5 or more drinks per occasion within the previous 2 weeks). The same study found 34% of athletes drank more than 11 drinks per occasion. In 2008, Yusko, Buckman, White, and Pandina studied several at risk social behaviors including alcohol, tobacco, illicit drugs, and performance enhancers. They found social drug use doubled for male athletes, and quadrupled for female SAs in the off-season. Lack of sleep is another consequence, as it may affect a SAs athletic and academic performance and more importantly, overall health. Wilson and Pritchard (2005) found that athletes reported a significant loss of sleep as freshmen.

It is apparent, based on the research, that SAs are utilizing unhealthy coping mechanisms to handle the stressors that accompany being a student athlete. However, the consequences are only multiplied when an individual fails to deal with or correct factors that create stress, and in sport, stress and anxiety is commonplace and vocalizing it is considered a weakness. As a result, there is a debilitating stigma associated with expressing one's stress, anxiety, or any mental health issue as an athlete.

Eustress & college athletes. It is important to understand not all stress in athletics can be considered detrimental. The concept of *eustress*, specifically as it relates to athletes, can be the positive side-effects of a number of different aspects of college athletics. Watson's 2016 study found a positive relationship for athletes in their athletic identity and perceived stress. This suggests that collegiate athletes use the various components of their unique status, i.e. working out, practice and playing to help form a positive perception of their athletic identity. This concept supports how although these activities are time consuming and potentially stressful, they are positive in the life of a collegiate athlete.

In Armstrong & Oomen-Early's 2009 research on predictors of depressive symptomatology, they determined that social connectedness and self-esteem were determining factors in predicting if a college student self-reported more depressive behaviors. They found that on both of those measures that the collegiate athletes' scores were statistically higher than the non-athletes. One could conclude that college athletics can play a positive role in combating depression due to the built-in social structure of a team.

Student-Athletes and Mental Health Stigmas

With SA's attitudes on help seeking behaviors continuously evolving, the question remains, how are ~~our~~ athletes currently perceiving themselves and teammates when seeking mental health supports? Research shows that there is a direct relationship between lack of self-seeking mental health support and a high level of personal stigma (Lopez & Levey, 2013). Watson's (2005) found that SAs have fewer positive attitudes toward help seeking than their

nonathlete peers. One of the most challenging barriers to conquer is numerous types of stigma. For instance, the athlete's thoughts and feelings towards themselves seeking help (personal stigma), their perceptions of their fellow athletes' thoughts on seeking help (personal perceived stigma), and the general public's thoughts on seeking help (perceived public stigma). Each of these factors contribute to SAs deciding if and when to seek mental health help. Watson's (2005) research, found that despite college athletes having a higher risk for mental health issues their attitudes towards help seeking behaviors as well as utilization of mental health supports were less positive than their non-athlete counterparts.

   This concept was further confirmed by Kaier, Cromer, Johnson, Strunk, and Davis (2015). This study found SAs had higher levels of personal stigma and personal perceived stigma than the general college student population. The authors hypothesized that athletes are fearful of being recognized at campus counseling offices or other self-help seeking resources. All aspects of perceived stigma are roadblocks for SAs seeking mental health help. It prevents them from educating themselves on self-seeking behaviors which leads to their refusal to use mental health resources. Martin, Wrisberg, Beitel, and Lounsbury (1997) indicated that athletes' stigma toward mental illness negatively correlates with an athlete's willingness to consult with a sport psychologist. Athlete stigma can develop from many sources. For instance, researchers Rafal, Gatto, and Debate (2018) found a relationship between low mental health literacy and high levels of personal stigma regarding self-seeking mental health help among SAs. It is important to understand the root causes of stigma so that we can address it in educational programming.

   Perceived attitudes of coaches and fellow athletes. If one were to ask an athlete to define the culture of their team, most athletes would state, family. An athlete's relationship with their teammates and coaches are among the most important of their lives. In particular, the coach-athlete connection can be one of the most significant relationships. Due to the importance of this relationship, it is understandable how easily an athlete can be influenced by his/her coach. For instance, many athletes firmly believe they should play through any form of the pain, to suck it up, and there is no complaining. These beliefs, though sometimes generated at the lower levels, are fortified by coaches at the collegiate level (Moore, 2017). However, when coaches use terminology like suck-it-up or never show weaknesses, it can either consciously or subconsciously create negative associations for help seeking behaviors (Moore, 2017).

   Specifically, at the intersection of mental health and athletes perceptions of their coaches, Wilkerson, Stokowski, Fridley, Dittmore and Bell (2020) found that black football SA's perceived their coaches as viewing team members that utilized mental health resources, as less capable players. In addition, Wilkerson et. al. (2020) had the following SA response, "Josh felt his coaches did not talk about mental health because "all they care about is us playing football." He continued, "they don't want to talk about it" and "they really don't care" (p.68). It's clear our athletes perceive their coaches as either silent or more dangerously, non-supportive of seeking mental health help. Biggin, Burns, and Uphill (2017) performed a qualitative analysis that compared athlete perceptions of mental health to coaches' perceptions of athlete mental health. Athletes listed the following individuals who would support them if struggling with mental health issues (in descending order): sports psychologist, clinical psychologist, and sports coaches. Coaches listed sports psychologist, clinical psychologist, and counselors. These results further highlight the disconnect between expectations of SAs and coaches as it relates to mental health support.

The concept of stigma was discussed in the previous section, but specifically how an athlete perceives their fellow teammates views on seeking mental health support can potentially affect team dynamics. Wilkerson et.al (2020) found two common sub-themes arise from their research with college football players; stigma and toughness. Players described the team dynamic as who's the manliest and that mental health issues were not openly discussed in the locker room. Gulliver, Griffiths, & Christenson (2012) found athletes commonly felt that their teammates would perceive them as weak if they sought help from a psychologist. The importance of team concept for athletes cannot be overstated. It has been illustrated that being a team member is a basis for positive athlete identity but can also have a negative affect mentally if the same team is not externally supportive of players seeking mental health support when needed.

Benefits of Help Seeking Behavior

It is not only that SAs underutilize mental health services, the general student body behaves similarly. Hunt and Eisenberg (2010) reported a meager 18% of college students seek treatment when struggling with poor mental health. However, several therapeutic disciplines show there are numerous benefits from utilizing mental health support systems. Vidic, St. Martin, and Oxhandler (2017) did mindfulness interventions with a Women's Division I NCAA basketball team and found mindfulness reduced stress and increased athletic coping. Turner, Ewen, and Barker (2018) found a significant reduction in social anxiety when they administered Rational Emotive Behavior Therapy to amateur golfers. The golfers self-reported a reduction in performance & social anxiety. Dubuc-Charbonneau and Durand-Bush (2015) performed a study on the effects of Self-Regulation Intervention on college SA's stress, burnout, and well-being. The researchers found that a person-centered, affect-based intervention demonstrated positive effects both qualitatively and quantitatively on self-reported reduction in SA stress and burnout levels. This intervention strategy also increased SA well-being and their ability to self-manage stressors. Overall these studies show numerous mental health interventions which increase athletes performance and reduce stress and anxiety. So, the question becomes if mental health services can be beneficial, why don't SAs self-seek resources that can improve their well-being?

As previously discussed, stigma is one of the most powerful obstacles for athletes, most SAs negatively perceive therapeutic interventions therefore completely avoid mental health resources. In fact, when compared to other services available within the athletic department, Moore (2017) found that SAs felt the least comfortable in seeking mental health services. That is, college athletes felt little or not at all comfortable with seeking mental health services compared to athletic and academic services. Moore also determined athlete's perceive negative stigma from others if they sought mental help. It has been established that there are several mental health and well-being interventions that have decreased SA's perceived stress and anxiety and positively increased their well-being, yet SAs continue to refuse use of mental health support structures. There is a strong need to determine SA perceptions of mental health, so administrators can better serve this vulnerable population. The current study aims to explore perceptions of anxiety, stress, coping as well as self- and teammate perceptions of help seeking behavior. It is the hope of the authors that this research contributes to growing conversation about helping SAs with mental health issues.

Method

Sample and Procedures

The target population for the current study was Division I intercollegiate SAs. This population was chosen as time demands and expectations were theoretically higher at the highest level of NCAA competition. This is not to say Division II and Division III athletes do not struggle with mental health issues, they certainly do, but as this study was preliminary and exploratory, we wanted to start with the highest level and potentially work our way down the divisions in future studies. Four athletic departments were targeted; one at the Power Five level of competition, one at the Group of Five, one Mid-Major, and one small Division I school. One school at each level of competition was chosen to provide the most comprehensive understanding of all Division I athletics not just one specific level. Access to SAs was gained through each university's athletic director or sport psychology department. Data were collected over a six-month period, and the survey was emailed to all athletes from each partner. Participation was voluntary, and given the aim of the study, the university partners solicited participants in season. Participants were sent three emails that included two reminders. Athletes in every sport at the school and at every level (freshman, sophomore, etc.) were sent the survey including the informed consent. Given the nature of the survey, the universities and the athletes will remain anonymous.

In total, 230 SAs started the survey with 158 completing (37 Freshman, 38 Sophomores, 51 Juniors and 32 Seniors/Graduate Students). We were not the individuals to solicit respondents via email; thus, it was difficult to calculate the exact population because of roster sizes of teams out of season and graduation. However, from university websites, we were able to surmise that close to 2,000 SAs received the email (approximately 750, 700, 350, 200, respectively). As a result, our response rate was 8%. Ideally, we would have liked a larger sample, but once again, given the above challenges of the topic and guarded nature of SAs from a time demand and athletic department reputation perspective, we felt that 158 was more than respectable and certainly enough to analyze our data. That said, generalizability to the broader SA population is a concern, but given the preliminary and exploratory nature of the study, it was an adequate first step. There was a total number of 18 sports represented including golf (men's & women's), softball, volleyball, ice hockey, field hockey, football, swimming & diving (men's & women's), soccer (men's & women's), cross country (men's & women's), track & field (men's & women's), and women's basketball. The sample was primarily female (77%) and Caucasian (83%).

Instrumentation

The questionnaire was a combination of theoretically established scaled items adapted from the literature and newly created items based on specific demands of our university partners. That is, questions were reviewed by participating institutional administrators and sport psychologists, and as a result, some items were added due to interest at a participating university. While this aspect may not fully fall in line with traditional academic research, we concluded that fulfilling partner needs from a mental health perspective was vitally important. It is also critical cementing the relationship and bridging the gap between theory and practice.

The forms of stress related to RQ 1 were self-reported behaviors operationalized within the following three dimensions: (1) Stress Outcome, frequency of daily outcomes that SAs attribute to stress (e.g., lack of sleep, poor eating habits, and anxiety), (2) Stress Loss, frequency of stress due to the fear of losing something (e.g., playing time and scholarship), and (3) Stress Coping, frequency of an SAs coping mechanism to stress and anxiety (e.g., drug or alcohol dependency). These items are available in Appendix A and were measured on a five-point Likert type scale (1 = Never and 5 = Always). This measurement of stress was developed and vetted by athletic department administrators specifically for this study. The items, however, were theoretically grounded in the career layoff research of Wiesenfeld, Brockner, Petzall, Wolf, and Bailey (2001). Given the dearth of mental health perception and coping research among SAs, the current researchers looked to the field of career development and concluded the stress and anxiety is similar given the time demands. However, as these are new items developed for this project, we ran a confirmatory factor analysis (CFA) prior to testing our research questions to ensure the factor validity. In addition, we ran a Cronbach's alpha analysis to test internal consistency.

To answer RQ 2, participants were asked to rate the likelihood they would seek help from their coaching staff, team-specific support personnel, and non-team support personnel within the athletic department. Each of these groups (independent variable) were operationally defined a priori. Coaching Staff was defined as the head coach or assistant coaches. Team Support Personnel was defined as trainer, academic advisor, performance coach, and Non-Team Support Personnel was defined as life skills/athlete program coordinator, leadership coordinator, physician, counselor, and sport psychologist. The dependent variable, likelihood to seek help was measured on a five-point Likert-type scale from highly unlikely to highly likely. These items were developed based on Watson's (2005) work of help seeking behavior of SAs toward general counseling (see Appendix A for items). Given the aim of the study, the independent variable was changed from general university counseling services to athletic department groups.

Research question three explored the relationship between the likelihood of seeking help from the coaching staff, team support staff and/or non-team related support staff and the SAs ability to manage stress and anxiety. Use of athletic department support staff was measured similarly to RQ 2 on a five-point Likert-type scale from highly unlikely to highly likely. The ability to manage stress and anxiety, or what the current study termed stress management, was measured by combining all of the stress, anxiety, and coping mechanism items into one omnibus mean score. In total this factor was represented by 10 items.

To measure perceived stigma of seeking mental health services, Eisenberg, Downs, Golberstein, and Zivin's (2009) perceived public stigma instrument was adapted and utilized. Eisenberg et al.'s (2009) scale was based on the Discrimination-Devaluation (D-D) instrument developed by Link (1987). In the 2009 study by Eisenberg et al., the instrument has received internally consistent scale scores (α=.89). Changes to the established scale were made due to the unique context of the current study. For the most part, the general nature of "most people" was changed to "my teammates." There were three perceived stigmas associated with seeking services: acceptance, failure, and trust. The first two items address the perceived acceptance of seeking behavior while the last speaks to the confidentiality of seeking mental health services. Participants were asked to rate their perceptions of teammates seeking help and the perception of how their teammates would treat other teammates seeking help on these three items. The items were measured on a five-point Likert-type scale from strongly disagree to strongly agree (see Appendix A for the items). A Cronbach's alpha statistic was run to assess the reliability of the

adapted scale score. In addition to the research question related items, a number of descriptive and context related questions were added to understand more broadly the perceptions of mental health in college athletics.

Data Analyses

To answer RQ 1, a paired samples *t*-test was utilized to explore differences in stress among SAs. Mean agreement differences were explored between the three forms of stress experienced by SAs. A paired samples t-test was also conducted to answer RQ 2, as mean likelihood of help seeking behavior differences were sought between the three athletic support groups. To answer RQ 3, a Pearson correlation was run to assess the relationships between SAs utilizing specific athletic personnel and their ability to manage stress. Lastly, three paired samples *t*-tests were conducted to test differences between SA's self-perception and their perceived teammate's perception of seeking mental health services for each of the three attitudes toward seeking mental health services (acceptance, failure, and trust). All tests were analyzed at an $\alpha = .05$ level. Once again, for any items combined to create a factor, Cronbach's alpha was conducted to test the internal consistency of the scale scores.

Results

Prior to analyzing data for the research questions, descriptive statistics were compiled about this sample's general thoughts and opinions about mental health and their SA experience. See table 1 for frequencies, means, and standard deviations. Prior to analyzing RQ 1, a CFA was run to ensure the factor structure of the new items. The CFA resulted in a three-factor, nine-item model to measure SA stress and coping. Each of the nine items remained as hypothesized. The model was statistically significant ($\chi^2 = 96.81$), and the values for Root Mean Square Error of Approximation (.061), Comparative Fit Index (.951), and Tucker Lewis Index (.945) all reflect an adequate fit to the data (Bentler, 1990). Table 2 provides the individual items, factor loadings, and Cronbach's alpha scores. As it relates to RQ 1, SAs were more likely to experience stress related outcomes than stress related to loss and coping mechanisms (see Table 3). SAs perceived the daily effects of stress on their lives (Stress Outcomes) as the most difficult aspect of stress for them to manage.

In order of preference, the RQ 2 results (Table 4) found that SAs are more likely to seek help from Non-Team Support Personnel than Team Support Personnel, and Coaching Staff. The RQ 3 results (Table 5) indicate SAs who struggle with stress management ($\alpha = .80$) do not view team-related support groups (Coaching Staff -.208 and Team Support Services -.197, correlation for these two was significant at the 0.01 level) as supportive of mental health issues. This study found no relationship between stress management and the likelihood of confiding mental issues with Non-Team Support individuals (-.015.)

In general, on a five-point scale, SAs would accept and trust teammates and perceive their teammates would do the same for other teammates (see Table 6). However, the RQ 4 findings show there are statistically significant differences between how SAs perceive themselves and their teammates who seek mental health help and how SAs perceive fellow athlete's perceptions of teammates seeking mental health. Generally, the participants perceived their teammates as slightly less accepting and trusting of teammates that seek mental health than they would be.

Table 1
Descriptive Statistics of Sample

		N	**%**
Have you encountered a fellow athlete struggling to manage their academics, athletics, and/or social life?			
	Yes	153	97%
If you knew a fellow athlete was engaging in risky behavior (e.g., drug/alcohol abuse, sexual promiscuity, skipping class) would you report it to an identified staff person in the athletic department if it was confidential?			
	Yes	13	8%
	Depends	127	80%
	No	18	11%
If you knew a fellow athlete was struggling with anxiety, depression or feeling distressed in any way, would you feel obligated to report your concerns to an identified staff person in the athletic department, if it was anonymous?			
	Yes	61	39%
	Depends	86	54%
	No	11	7%
Do you feel your coaching staff could offer support if you were in emotional crisis?			
	Yes	79	50%
	I don't know	36	23%
	No	43	27%
If you lost your scholarship, do you think you could afford to continue to attend your current school?			
	Yes	51	40%
	I don't know	16	13%
	No	59	47%
	Not applicable	32	
How often does stress of athletics and academics positively impact your college experience? [1]			
	M (SD)		1.37 (1.12)
If you made the decision to seek mental or emotional support, how likely would you go to your University's Counseling Center? [1]			
	M (SD)		2.68 (1.12)
How likely would you have taken advantage of a safe, confidential facility to discuss academic, athletic or social concerns if it was in the athletic complex? [1]			
	M (SD)		3.38 (1.07)
How likely would you feel comfortable talking to an identified staff person in the athletic department about stressors related to being a student athlete, knowing it was confidential? [1]			
	M (SD)		3.54 (.98)

[1] *Measured on a five-point scale from highly unlikely to highly likely.*

Table 2
Factor Loadings and reliability from confirmatory factor analysis with oblique rotation (N=158)

Factor	Factor Loading	Cronbach's alpha
Stress Outcome		**.81**
How often does your anxiety affect your daily living?	.887	
How often do you feel mental stress about athletic performance?	.741	
How often is your sleep negatively affected by stress?	.811	
Stress Loss		**.78**
How often do you worry about losing your place on the team due to poor academic performance?	.771	
How often do you worry about losing your place on the team due to poor athletic performance?	.728	
How often do you worry about losing playing time?	.712	
How often do you worry about losing your scholarship?	.631	
Stress Coping		**.73**
How often do you use alcohol as a stress reliever?	.927	
How often do you use drugs as a stress reliever?	.899	

Note. Measured on a 5-point Likert-type scale from Never (1) to Always (5)

Table 3
Differences of Stress (RQ 1)

		Paired Samples *t*-test				
		Mean (SD)	Mean Dif	t	df	Sig, (2-tailed)
Pair 1	**Stress Outcome**	3.263 (.868)	1.696	23.382	157	.000
	Stress Coping	1.567 (.651)				
Pair 2	**Stress Coping**	1.567 (.651)	-.633	-6.725	157	.000
	Stress Loss	1.991 (1.084)				
Pair 3	**Stress Outcome**	3.262 (.868)	.097	10.977	157	.000
	Stress Loss	1.991 (1.084)				

Table 4
Perceptions of Support (RQ 2)

		Paired Samples *t*-test				
		Mean (SD)	Mean Dif	t	Df	Sig. (2-tailed)
Pair 1	**Coaching Staff**	2.660 (1.193)	-.798	-7.661	155	.000
	Non-Team Support	3.458 (.809)				
Pair 2	**Coaching Staff**	2.660 (1.193)	-.410	-4.360	154	.000
	Team Support Services	3.058 (1.102)				
Pair 3	**Non-Team Support**	3.458 (.809)	.400	4.237	154	.000
	Team Support Services	3.058 (1.102)				

Measured on a 5-point Likert-type scale from Strongly Disagree (1) to Strongly Agree (5)

Table 5
Correlation of SA's likelihood of using Staff for Support and Stress management (RQ 3)

Correlation Analysis (*N*=155)		Stress management
Non-Team Support	Pearson Correlation	-.015
	Sig. (2-tailed)	.858
Coaching Staff	Pearson Correlation	-.208**
	Sig. (2-tailed)	.009
Team Support Services	Pearson Correlation	-.197*
	Sig. (2-tailed)	.014

Table 6
SA's Perceptions of Help Seeking Behavior (RQ 4)

		Mean (SD)	Mean Diff	t	df	Sig. (2-tailed)
Paired Sample *t*-tests						
Pair 1	**Perceived Teammate Accept**	4.301 (.868)	-.353	-5.549	155	.000
	Self-Accept of Teammate	4.654 (.649)				
Pair 2	**Perceived Teammate Trust**	4.032 (.941)	-.455	-6.010	155	.000
	Self-Trust in Teammate	4.487 (.846)				
Pair 3	**Perceived Teammate Failure**	2.039 (.946)	.692	9.327	155	.000
	Self-Failure of Teammate	1.346 (1.076)				

Discussion

The current study examined SAs' perceptions of stress, coping, and the support provided individuals and teammates as it relates to help seeking opportunities. The findings provide for a number of theoretical and practical implications, as the sample supplied results that confirmed and contrasted previous research in the field. The results of each research question will be discussed in detail below as well the practical implications for coaches, administrators, and counselors. As research in the area is growing, the results are still preliminary and exploratory. But, given the challenges of reaching this guarded population, these results contribute to the on-going conversation of SA stress and mental health well-being.

In general, this sample struggled managing the most important aspects of being a college athlete, and this stress did not positively impact their experience. They were also more likely to take advantage or seek guidance from an athletic department specific mental wellness facility as long as it was confidential. As it relates to the SAs' relationship with their coaching staff, 50% were unsure or did not think their coaching staff could offer support if they were in an emotional crisis. Of the scholarship athletes, only 40% knew they could afford tuition without a scholarship. Only 8% felt obliged to report a fellow athlete if engaging in risky behavior while 40% felt obliged to report an athlete struggling with anxiety or depression.

As it relates to RQ 1, the results indicate SAs experience types of stress and coping differently. The paired samples *t*-test showed that each form of stress was different at a statistically significant level, where Stress Outcome was rated most frequently followed by

Stress Loss then Stress Coping. However, on a five-point scale, Stress Outcome was the only form of stress to provide above average evidence that SAs struggle with stress. So, while it is concerning that this sample of SAs often feel alone, feel anxious, and the stress impacts their sleeping and eating, it is encouraging that drug and alcohol dependency does not appear to be an issue. The fear of losing their scholarship, place on the team, and/or playing time also rarely appears to be an issue for this sample. Thus, Wiesenfeld et al.'s (2001) stress and coping factors do not all relate to the SA experience in all facets.

Research question two tested the perceived differences in seeking help from three different support personnel groups. Similar to RQ 1, differences between each group were uncovered through the *t*-test. The SAs in this sample were more likely to engage with non-team support personnel followed by team support personnel. Finally, the head coach and assistant coaches were the last group these SAs would talk to about stress and anxiety. The means for each personnel group suggest less skewed data than RQ 1, as the means ranged from 2.660 and 3.458 on a five-point scale. These results confirm previous research that SAs hide negative feelings from coaches (Sinden, 2010). Thus, while the RQ 1 findings related to stress about losing playing time or place on the team seem tenable, SAs in the sample indicated a tendency to avoid stress related conversations with coaches. This is slightly contradictory and worrisome due to the potential of coaches in the SA mental health conversation.

Rice et al. (2016) acknowledged the importance of athlete-coach relationship in supporting the positive mental health of SAs. Mazzer and Rickwood (2015) suggested coaches can provide the gateway for SAs to feel propelled to seek mental health. Thus, a strong coach-athlete relationship could potentially deter the mental health stigma and increase the number of SAs seeking services they need. Biggin et al. (2017) asked coaches and athletes to rate appropriate ways in which a coach can support their athletes, and both groups reported in their top three the need for coaches to be able to recognize signs and symptoms of mental health issues. Athletes ranked it second and coaches ranked it third. Coaches remain the most influential individual in a SAs college experience; thus, education about the opportunity they have to positively contribute to the conversation about mental health is highly important for the greater well-being of SAs. More research in this area is advised in this discussion.

Research question three explored the relationship between the three personnel groups and a SA's ability to manage stress and anxiety. These results were unique. The first correlation of the non-team support group found no evidence of a relationship between engaging with the group and the ability to manage stress. The correlations for other two groups (coaching staff and team support personnel) were statistically significant and indicated a negative relationship. Thus, as one's likelihood to seek help from a support personnel increased their ability to manage their stress and anxiety decreased. Two potential phenomena could be occurring here. First, those with no signs of mental health concerns are more likely to engage with coaches and team personnel about stress because they have had no previous experience dealing with it. Or, those SAs dealing with stress are less likely to seek help from these groups because they are dealing with a difficult situation and do not want it to cast them in a negative light. Both provide interesting propositions, yet the current study just found statistically significant negative relationships. There is a unique opportunity to explore *how* and *why* these relationships exist.

Lastly, RQ 4 examined the differences between self-perception of one's teammates and the perceived perception of teammates as it relates to the acceptance and stigma of seeking mental health services. Specifically, the factors of acceptance, trust, and failure were tested. The results indicated statistically significant differences at each level, and in general, the SAs in this

sample perceive teammates who seek help more favorably than how they think their teammates perceive other teammates who seek mental health services. In other words, the perception *among SAs* is teammates will not support someone who seeks mental health services, but in actuality, SAs accept, trust, and do not consider the teammate a failure who does. These results are imperative in changing the narrative about mental health within a team culture. Moore (2017) determined that 50% of athletes perceived a negative stigma from others if they sought mental help. However, Barnard (2016) found the gap between attitudes of SAs and non-SAs seeking mental health help had trended down. Thus, there is a chance if this information gets out that SAs will begin to see each other as a source of support, not a source of stigma.

Implications for Universities and Athletic Departments

Over the last five years, athletic departments have become increasingly in-tune with the growing need for athlete's mental health (Carter, 2019). This study's focus was to continue the conversation about perceptions of SA stress and barriers to seeking help. For practitioners looking to activate this work, the first step is education. The SAs in this sample may not be utilizing the traditional coping mechanisms, but they are still dealing with an above average frequency of stress, and this stress is frequently impacting sleep and eating habits. As a result, coaches and administrators must be increasingly sensitive to their plight for a number of reasons. First, and most importantly, from a human perspective it is imperative we look out for each other especially during the crucial and emotional time of one's college experience. Second, for self-preservation, SAs that are stressed and not sleeping and eating properly will likely not perform on the field to the best of their abilities. Third, coaches and team-related personnel play such an influential role in an SAs experience, and the opportunity to positively impact this time is likely why most individuals got involved with athletics in the first place.

Also, regardless of the source of stress, the conversation about mental health and in particular seeking mental health services need to change. The stigma associated with both are real barriers for SAs. This research supports a positive trend in decreasing stigma of mental health help seeking behavior. It is clear SAs have the potential to bring various preconceived ideas about seeking mental health help to the college experience, yet their own perceptions provide evidence that those notions are assumptions and not the truth. Bauman's (2016) editorial suggests there are many causes for athlete stigma including social & familial history, sport organizational, fear of financial repercussions, pressure to be successful by team organizations and media. All these root causes which translate to athletes feeling like they must always have mental toughness (Bauman, 2016). In addition, Gulliver, Griffiths, and Christenson (2012) found pressure to perform from self, coach and families, provide anxiety and depression if the athletes under perform in competition. With athlete perceptions derived by familial, perceived stigma, or coach influence, it is important that coaches and administrators are able to communicate the results of this study to SAs, so they understand that the stigma narrative is not necessarily true. In addition, more inclusive programming, separate from the team, will only help SAs engage in mental health discussions in the immediate future as the perception of stigma changes.

In general, the implications of this work point to the need for mental health literacy programs to reduce stigma.

University athletic departments need to be cognizant of the time demands that are placed on their athletes during this crucial period of adjustment. Additionally, prevention

programs need to be implemented that help assist the freshmen athlete in dealing with potential sources of stress (p. 6, Wilson & Pritchard, 2005).

Mental health education and well-being strategies should be a priority for SAs as well. Not only for reducing their stress day-to-day, but also to reduce the stigma associated with mental health and to increase the use of mental health services. To do so, athletic departments should consider: (1) adding an embedded mental health and wellness curriculum including strategies to manage stress and anxiety, (2) creating mentorship programs for SAs to understand the real feelings SAs as opposed to the stigma narrative, and (3) forming group sessions for athletes to start the conversation and build support groups around the subject.

　　While mental health services are growing on campus, the continued stigma remains; thus, more research is still needed to help guide programming and serve our student populations. Continued access to SAs' evolving perceptions on seeking mental health help as well as what are the barriers that prevent them from help seeking behaviors, will remain pivotal in creating sustainable programming and constructs to improve their intuition's response and support of their SAs' mental well-being.

Limitations and Future Research

　　This research had a number of limitations. First, the sample size was less than desirable, but once again, given the population acceptable for an exploratory study. That said, additional research on larger, more diverse samples is always ideal. Second, although two of the four universities had football, only two responses were from football players. Also, not one men's basketball player completed the survey despite each school having a men's basketball program. These two programs are the revenue generating sports; therefore, data related to their perceptions of stress are important. This is not to mention the lack of men and athletes of color, in general. Our sample was 77% female and 83% Caucasian. Surely, this does not fully-represent an athletic department, but given the exploratory nature of the study. We hope the findings provide an initial step for further inquiry. Future research should do a better job sampling this population.

　　Third, this study was quantitative by design, and thus, differences and relationships of instrument mean scores were examined. Depth of why the perceptions were formed or how it impacted their experience were not examined. As a result, there is an opportunity for a qualitative follow-up or extension of these results. Fourth, since all the respondents were Division I athletes, we cannot assume the results would translate to other Divisions. It would be interesting if future work explored lower division athletes and even compared the perceptions to Division I SAs. Lastly, there was no control group. Some of the previous work utilized non-athletes as a baseline or comparison group for mental health examinations. This study did not, and a comparison of perceptions would be fruitful. Other ideas moving forward include examining success rates of any current mental health curriculum used within athletic departments. Researchers could also determine the success of athletic department models that have an embedded mental health program and/or clinician. Future studies should also examine coaching styles and coaching perceptions of athletes seeking mental health.

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Appendix A

Instrument Factors and Items

Coaching staff
If you feel stressed how likely would you talk to your head coach?
If you feel stressed how likely would you talk to an assistant coach?
Team Support Services
If you feel stressed how likely would you talk to an athletic trainer?
Non-Team Support Services
If you feel stressed how likely would you talk to an academic adviser?

Perceived Teammate Accept
Most of my teammates would willingly accept a teammate who has received mental health treatment.
Perceived Teammate Trust
Most of my teammates believe that a teammate who has received mental health treatment is just as trustworthy as the average athlete.
Most of my teammates would treat a fellow athlete who has received mental health treatment just as they would any other teammate.
Perceived Teammate Failure
Most of teammates would feel that receiving mental health treatment is a sign of personal failure
Most of teammates would think less of a fellow athlete that has received mental health treatment.
Self-Accept of Teammate
I would willingly accept a teammate who received mental health treatment.
Self-Trust in Teammate
I believe that a teammate who has received mental health treatment is just as trustworthy as a teammate that has not received mental health treatment.
Self-Failure of Teammate
I would think less of a teammate that had received mental health treatment.