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Supporting Student-Athlete Mental Health: NCAA Division I Coaches' Experiences, Perceived Role, and Barriers

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SUPPORTING STUDENT-ATHLETE MENTAL HEALTH: NCAA DIVISION I COACHES'
EXPERIENCES, PERCEIVED ROLE, AND BARRIERS

by

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(Under the Direction of Brandonn Harris)

ABSTRACT

The opportunity for coaches to play an important role in supporting student-athlete mental health has been increasingly identified (Biggin et al., 2017; Gulliver et al., 2013; Henrikson et al., 2020). Findings suggest that coaches have the potential to help identify athletes who may benefit from mental health services, as well as foster an environment supportive of mental health and help-seeking (Bapat et al., 2009; Bissett et al., 2020). Recommendations have been set forth regarding how coaches may best engage in their role of supporting mental health, however, the literature lacks evidence of what collegiate coaches are actually doing to support student-athlete mental health, what they perceive their role to be, and barriers they face in fulfilling that role. The present study used a generic qualitative approach to explore the experiences of nine National Collegiate Athletic Association Division I coaches in supporting student-athlete mental health. Coaches discussed engaging in a variety of supportive behaviors consistent with recommendations for coaches. However, it appears coaches may lack engagement in supportive behaviors that take place after a referral is made. Coaches perceived multiple roles in supporting student-athlete mental health and discussed a variety of barriers including lack of self-efficacy and insufficient resources. Results of this study can be used to inform future research aimed at designing mental health education resources for coaches.

INDEX WORDS: Coach, Student-athlete, Mental health, Coach education, Supporting mental

health

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by

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DEDICATION

This work is dedicated to my parents and brother.

Mom and Dad, your unwavering love, support, and belief that I am capable of achieving any goal I set are what allowed this project to exist. Ben, the ease and grace with which you pursue your goals inspires me.

The journey continues, and I owe it all to you three.

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CHAPTER 1

INTRODUCTION

Nearly half of college students in the United States report experiencing depressive symptoms and nearly two-thirds report experiencing overwhelming anxiety (American College Health Association, 2019). Findings suggest that student-athletes experience mental illness at similar rates to the general college student population (Davoren & Hwang, 2014; Drew & Matthews, 2017; Eisenberg & Lipson, 2018; Yang et al., 2007). In fact, the National Collegiate Athletic Association's (NCAA) chief medical officer declared in 2020 that the number one health concern for student-athletes involved their mental health (Henry, 2020).

Not only are student-athletes subject to the same stressors as the general college student population including new living environments, change in social activities and peer groups, increased academic demands (Acharya et al., 2018), greater independence, and finding a career path (Mayhew et al., 2016;), it is widely recognized that they are also subject to additional stressors and demands unique to their roles as student-athletes that may increase their likelihood of experiencing mental ill-health (Davorin & Hwang, 2014; Egan, 2019; Etzel, 2006). Student-athletes report stressors such as strict scheduling, missed classes and decreased time for academics due to travel, performance pressures, (Cosh & Tully, 2015), overbearing surveillance and control (Hatteberg, 2018), and sport injuries (Patukian, 2015). The NCAA reported in 2016 that approximately 30% of student-athletes had felt "intractably overwhelmed during the past month" (NCAA, 2016, p. 4) and data suggests that up to 60% of athletes feel that mental health issues impact their performance (Kern et al., 2017). Data also suggests that as many as one-third of student-athletes experience depressive symptoms at the clinical level (Drew & Matthews, 2017) and that involvement in sport may increase the risk of athletes engaging in behaviors like

disordered eating (Petrie & Greenleaf, 2007; Wells et al., 2015) and binge-drinking (Martens et al., 2006; Parisi et al., 2019).

Despite the prevalence of mental health concerns, college students have been identified as a population that underutilizes mental health services (ACHA, 2019; Eisenberg & Lipson, 2018). Data suggests that the percent of college-aged individuals experiencing mental illness who actually receive mental health services may be as low as 15% (U.S. Department of Health and Human Services, 2019). Studies also indicate that similar to the general student population, student-athletes may also be underutilizing mental health services due to a variety of barriers (Gulliver et al., 2012; Lopez & Levy, 2013; Moore, 2016; Moreland et al., 2018). One barrier that has consistently been identified in the literature includes athletes' own help-seeking attitudes, which have been identified as the strongest predictor of help-seeking behavior among college students (Li et al., 2014). For example, a study of 349 athletes across all NCAA divisions indicated that student-athletes reported feeling the lowest level of comfort seeking out health services as opposed to any other support services offered to them, with approximately 25% of athletes in the study citing little to no comfort seeking mental health services (Moore, 2017).

Stigma is one of the most commonly cited barriers to help-seeking by athletes (Biggin et al., 2017; Gulliver et al., 2012; Moore 2017) and has been found to be negatively associated with athlete help-seeking attitudes (Hilliard et al., 2019). When both public and self-stigma have been measured among athletes, a positive correlation between public and self-stigma has been identified (Hilliard et al., 2019; Kaier et al., 2015). This supports the finding that perceived stigma from others is often internalized, resulting in negative attitudes of oneself regarding help-seeking behavior (Pederson & Vogel, 2007; Vogel et al., 2006, 2007). One significant source of public stigma that athletes have identified pertains to their coaches, with athletes citing worry

that coaches will view help-seeking as a sign of weakness and feelings of disappointment from coaching staff as barriers to help-seeking (Gulliver et al., 2012, Lopez & Levy, 2013; Moore, 2019).

Coaches have been increasingly identified as having the potential to play an important role in the mental health and help-seeking of athletes by athletes, parents, sport organizations, and coaches alike (Biggin et al., 2017; Brown et al., 2017; Gulliver et al., 2012; Henriksen et al., 2019; Mazzer & Rickwood, 2015; NCAA, 2017). The NCAA Sport Science Institute's *Inter-Association Consensus Document: Best Practices for Understanding and Supporting Student-athlete Mental Wellness* (2013) directly states,

> "Because of the frequency of their interactions with student-athletes, coaches, faculty athletics representatives, SAAC representatives and fellow student-athletes play a central role in helping to identify student-athletes who may benefit from accessing resources related to mental health, normalizing care seeking and fostering a health-promoting environment that supports mental well-being and resilience," (p.14).

Researchers who have examined coaches' roles in supporting student-athlete mental health have echoed these claims (Bapat et al., 2009; Gulliver at al., 2012; Kroshus et al., 2014; Sebbens et al., 2016). The opportunity for coaches to impact athletes' feelings and behaviors about what is accepted and normal within their teams has been demonstrated in the literature. Findings suggest that coaches can impact athlete perceptions and intentions regarding health behaviors through the frequency of and manner in which they communicate (Beckner & Record, 2016; Milroy et al., 2019), role-modeling (Ward & Freysinger, 2014; Sabiston et al., 2020), and shaping expected consequences (Baugh et al., 2014; Bissett et al., 2020; Pensgard & Roberts, 2001). Recently, authors have utilized mental health prevention frameworks, research recommendations, and

expert opinions to conceptualize what exactly the role of coaches is in supporting athlete mental health and how they can engage in this role (Bissett et al., 2020).

The role of coaches regarding athlete mental health has been conceptualized by Bissett et al. (2020) using the World Health Organization's (WHO) prevention framework which consists of primary, secondary, and tertiary prevention measures (WHO, 2002). The full list of supportive behaviors included at each level of prevention can be seen in Figure 1. Primary interventions include those that aim to reduce mental illness occurrence among a population by making changes to the population's environment and providing individuals with coping skills (WHO, 2002). Within the sport setting, this level has been conceptualized simply as "Culture Setting." Some coach behaviors supportive of this level of prevention include communicating the value of help-seeking, utilizing stakeholder support, and reinforcing behaviors consistent with a culture that supports help-seeking (Bissett et al., 2020). Secondary prevention, conceptualized by Bissett et al. (2020) as "Identification and Referral," includes interventions that seek to shorten the duration of which mental health concerns are experienced via early identification and treatment (WHO, 2002). Coach behaviors congruent with this level of prevention include but are not limited to remaining aware of changes in athlete behavior and providing information regarding available support (Bissett et al., 2020). Tertiary prevention, deemed "Treatment Adherence" by Bissett et al. (2020), involves efforts to minimize the negative consequences of those experiencing and/or receiving treatment for mental health concerns (WHO, 2002). Coach behaviors congruent with this level of prevention include but are not limited to expressing willingness to modify demands related to sport and respecting an athletes' desired level of coach involvement in the treatment process (Bissett et al., 2020). The behaviors outlined in this framework are consistent with the behaviors promoted in the *Inter-Association Consensus*

Document: Best Practices for Understanding and Supporting Student-athlete Mental Wellness (NCAA, 2013). These behaviors are also consistent with what the latest educational intervention for NCAA coaches, the NCAA's *Supporting Student-Athlete Mental Wellness Module*", sought to promote engagement in including culture setting communication, making referrals, and providing social support (Kroshus, Wagner, et al., 2019).

While the opportunity for coaches to adopt a key role in supporting student-athlete mental health has been clearly established and recommendations have been made on how to do so, a lack of clarity remains regarding how coaches perceive and engage in this role. Studies have identified that athletes and coaches view the role of coaches in supporting mental health rather differently, with coaches identifying themselves as gatekeepers to mental health services as opposed to a direct source of support (Biggin et al., 2017). One study conducted in the United Kingdom asked athletes and coaches to identify the three most appropriate professionals to support athlete mental ill-health. While athletes rated coaches as one of the top three most appropriate professionals, coaches did not. Coaches and athletes who participated in this study were also asked to identify the most appropriate ways in which coaches support or could support athletes experiencing mental ill-health. While athletes included communicating openly as well as providing referrals to appropriate support among the top three most appropriate ways to provide support, coaches did not include either among their top three most appropriate ways to provide support (Biggin et al., 2017).

In Mazzer and colleagues' (2015) examination of coaches of elite youth athletes in Australia, eleven out of thirteen coaches recognized that supporting athlete mental health was a part of their role, consistent with findings of the percent of high-school coaches in the United States that see support as part of their role (Kroshus, Chrisman, et al., 2019). The majority noted

their role in identification of mental health concerns and referral practices, however no coaches discussed communication regarding the mental health or the value of help-seeking, one of the main behavioral recommendations put forth for coaches. Few studies, if any, have examined the topic of the perceived role of NCAA coaches in supporting student-athlete mental health.

Not only is there a dearth of literature regarding collegiate coaches' perceived roles, the research lacks information regarding what coaches are doing to support athlete mental health. Only one study in the literature has quantitatively examined NCAA coaches' identification of and responses to eating pathology among their athletes, which found that coaches appear to recognize their role in the identification of eating pathology, though may not be effectively engaging in this role (Sherman et al., 2005). No research in the past decade has been published in which collegiate coach experiences with or response to mental health concerns were explored. The most recently implemented and evaluated mental health education module for coaches collected data regarding coaches' intentions to engage in supportive behaviors, yet the research continues to lack identification of actual engagement in such behaviors (Kroshus, Wagner, et al., 2019)

Coaches also face barriers to providing support to student-athletes such as a lack of mental health literacy and awareness (Biggins et al., 2017; Hegarty et al., 2018; Sherman et al., 2005), a lack of self-efficacy (Kroshus, Chrisman, et al. 2019; Mazzer & Rickwood 2015; Sabiston et al., 2020), as well as their own mental health stigma and help-seeking attitudes (Kroshus, Wagner, et al., 2019). Several interventions aimed at reducing the variety of barriers that coaches face to supporting athlete mental health have been implemented and evaluated (Kroshus, Wagner, et al., 2019; Loughran & Skvarla, 2018; Pierce et al., 2010; Sebbens et al.,

2016) only two of which have taken place among NCAA coaches (Kroshus, Wagner, et al., 2019; Loughran & Skvarla, 2018).

Significance of the Study

In sum, collegiate coaches are lacking a presence in the literature regarding their experiences and perceived role regarding student-athlete mental health. While research suggests what coaches' intentions are to engage in supportive behaviors, the literature remains sparse regarding evidence of what coaches are actually doing to support their athletes. In addition, potentially negative perceptions of help-seeking have been identified among coaches (Kroshus, Wagner, et al., 2019; Olusoga & Kentta, 2017; Olusoga et al., 2009; Wrisberg et al., 2010), and have been found to be important determinants of their likelihood and willingness to engage in behaviors supportive of student-athlete mental health (Kroshus, Wagner, et al., 2019; Wrisberg et al., 2010; Zakrajsek & Zizzi, 2007). In order to effectively provide education to coaches that supports their engagement in the role of supporting student-athlete mental health, further understanding of coaches' own experiences with, perceptions of, and barriers to supporting student-athlete mental health are warranted (Bissett et al., 2020; Kroshus, Wagner, et al., 2019). Thus, the purpose of the present study is to explore collegiate coaches' experiences pertaining to supporting student-athlete mental health. More specifically, the study aims to (a) explore what supportive behaviors coaches are engaging in using the mental health prevention framework put forth by Bissett and colleagues (2020), (b) explore what role coaches perceive in supporting student-athlete mental health, and (c) explore barriers coaches face in providing student-athletes with mental health support.

Figure 1

Full List of Supportive Behaviors (Bissett et al., 2020)

	Coach target behaviours
Primary prevention	1.1 Coaches should verbally communicate to athletes their role in supporting athlete mental health, consistent with their sport organisation's mental health protocol.
	1.2 Coaches should verbally communicate their intention to encourage athletes to consult with a licensed practitioner with mental health service competencies when behaviours that represent mental health concerns are observed.
	1.3 Coaches should verbally communicate with athletes that they believe it is important to seek help (such as, but not limited to, medical, psychological and social support) for mental health concerns.
	1.4 Coaches should verbally communicate with athletes that they believe it is important to support peers in seeking help for mental health concerns.
	1.5 Coaches should enlist the support of relevant stakeholders (including, but not limited to, parents, administrators and support staff) to endorse the importance of athletes seeking help for mental health concerns.
	1.6 Coaches should communicate that sport-specific decision-making (eg, roster selections, playing time and so on) will not be dictated by an athlete's mental health concerns and/or care-seeking behaviour unless the decision is endorsed by a licensed practitioner with mental health service competencies.
	1.7 Coaches should share with athletes that addressing mental health concerns may improve athletic performance.
	1.8 Coaches should establish bidirectional coach–athlete relationships that emphasise honesty and openness.
	1.9 Coaches should engage in healthy self-care practices.
	1.10 Coaches should not use language that stigmatises mental illness and mental health help-seeking.
	1.11 Coaches should positively reinforce athlete behaviours that are consistent with a team culture supportive of mental health and mental health help-seeking.
	1.12 Coaches should communicate to athletes that they are receptive to feedback in how to improve the team's culture surrounding athlete mental health.
	1.13 Coaches should communicate to athletes that they are receptive to feedback in how to improve their own abilities in supporting athlete mental health.
Secondary prevention	2.1 Coaches should attend to changes in athlete behaviour that may indicate the emergence of a mental health concern.
	2.2 If coaches are concerned that an athlete is experiencing a non-emergency mental health concern, they should ask how the athlete is feeling and listen to the athlete's concern to initiate next steps consistent with their sport organisation's mental health protocol.
	2.3 Coaches should verbally communicate boundaries that govern what they can and cannot do when an athlete discloses mental health concerns or relevant behaviours are observed.
	2.4 Coaches should provide information to athletes experiencing a potential mental health concern about local resources for accessing licensed practitioners with mental health service competencies.
	2.5 In non-emergency situations, coaches should provide the athlete (or the athlete's parent/guardian if the athlete is a minor) with information about where care can be sought from a licensed practitioner with mental health service competencies.
	2.6 If coaches think an athlete may be an immediate threat to the safety of others, coaches should contact emergency services.
	2.7 If coaches think an athlete may be a threat to themselves, coaches should follow their sport organisation's emergency mental health protocol, unless there is no protocol in which case coaches should remain with the athlete until emergency services or a licensed practitioner with mental health service competencies has initiated next steps for care.
Tertiary prevention	3.1 Coaches should provide positive reinforcement to athletes who are actively engaged in seeking mental healthcare.
	3.2 Coaches should provide consistent ongoing support to all athletes regardless of an athlete's relative athletic ability and skill level.
	3.3 Coaches should protect the confidentiality of athletes' mental health help-seeking, consistent with athletes' preferences.
	3.4 Coaches should respect athletes' desired levels of coach involvement in discussing and supporting the medical and/or psychological management of mental health concerns.
	3.5 Coaches should express to athletes a willingness to modify sport-related responsibilities to accommodate treatment and recovery.
	3.6 Coaches should continue to offer athletes opportunities for engagement in team activities if athletes are taking a break from competition due to mental health concerns.

CHAPTER 2

METHODS

Methodology

A basic qualitative research approach, also referred to as a generic qualitative research approach, was used to explore coaches' experiences, perceived roles, and barriers associated with supporting student-athlete mental health. Qualitative studies conducted under a basic or generic approach are those in which the researcher seeks to understand how individuals interpret their experiences, the meaning they ascribe to those experiences, and how they construct their worlds (Merriam & Tisdell, 2009). A basic qualitative design was chosen for this study as the purpose of this study does not align with a specific methodology. The basic qualitative approach has been described as having a "lack of allegiance" to any specific methodology (Caelli et al., 2003, p. 1). A generic qualitative methodology has been distinguished from specific methodologies in the literature, being that the approach is often adopted when one specific methodology does not fit the purpose the study (Percy et al., 2015).

A basic qualitative approach differs specifically from a phenomenological approach in that the research is focused on the actual content of an experience, as opposed to the internal structures or "essences" of the process of experiencing (Percy et al., 2015). Percy et al. (2015) have put simply that from a basic qualitative approach, "if someone reported that anger was part of the experience, we'd be interested in the fact that someone was angry, not in what that experience of anger ("being angry") was like" (p. 77). For the present study, the researcher was seeking to explore what the experiences of coaches are in regard to supporting student-athlete mental health, as opposed to what their experiences providing support are like.

A basic qualitative approach is said to be appropriate when "the researcher has a body of pre-knowledge/pre-understandings about the topic that he or she wants to be able to more fully describe from the participant's perspective" (Percy et al., 2015, p. 78). The researcher of this study has knowledge of research that has suggested coaches play an important role in supporting student-athlete mental health, and what athletes and various stakeholders perceive this role to be. The researcher used this study to explore the perceived role and experiences of coaches from the perspective of the coach, as collegiate coaches currently lack a voice in the literature regarding this topic.

Participants

To be eligible for the study, participants had to have at least one year of experience coaching at the NCAA Division I level to ensure that they were able to speak to their experiences associated with student-athlete mental health at the Division I collegiate level specifically. Coaches' emails also had to be publicly available online.

Participants were male ($n = 5$) and female ($n = 4$) head coaches of teams which compete in the NCAA at the Division 1 level from nine universities located in seven of the nine U.S Census Bureau regions. Five participants coached at universities with football teams that compete in the Football Championship Subdivision (FCS), one participant coached at a university with a football team that competes in the Football Bowl Subdivision (FBS), and three participants coached at universities without a football team. According to the classifications outlined by the Carnegie Classification of Institutions (n.d.), four of the nine participants coached at mid-sized universities (student population between 3,000 and 9,999) and five of the nine participants coached at large universities (student population of at least 10,000). The mean age of participants was 41 ($SD = 8.07$) with ages ranging from 27 to 58. Participants' coaching

experience at the Division I level ranged from 3 to 26 years (M = 12.8 years SD = 2.17). All nine

coaches identified as White or Caucasian. The sports coached by male participants included

men's and women's golf, men's and women's rowing, men's and women's track and field, and

men's and women's cross country. The sports coaches by female participants included women's

golf, women's soccer, men's and women's track and field, and women's swim and dive (see

Table 1 for participant demographic information and pseudonyms).

The researcher sought to obtain a sample in which data saturation was reached. Data

saturation, also referred to as "informational redundancy," refers to the point at which no novel

meaningful units of data are gleaned from additional data collection (Sandelowski, 2008, p. 875).

Sim et al. (2018) have suggested that "determining sample size a priori is inherently problematic

in qualitative research, given that sample size is often adaptive and emergent" (p. 3). Patton

(2015) advises that researchers specify the minimum number of participants they are seeking,

while recognizing that this number may need to be adjusted.

Because specific sample size recommendations and minimums for studies utilizing a

generic qualitative approach have not been published, the researcher evaluated articles related to

the topic of the present study that have utilized similar methods of analysis in order to determine

a desired minimum sample size. Multiple studies pertaining to perceptions and experiences of

collegiate coaches have been published in journals in the field of sport, exercise, and

performance psychology. For example, in *The Sport Psychologist,* Zakrajsek et al. (2013)

collected data using semi-structured interviews with eight collegiate coaches. Lebrun et al.

(2020) conducted semi-structured interviews with eleven coaches regarding their experiences

and perceived role supporting youth athletes with mental health concerns. Lebrun et al. (2020)

used the same method of data analysis proposed for the present study. Weinberg et al. (2001)

published qualitative findings of coach perceptions collected among fourteen NCAA coaches in *The Journal of Applied Sport Psychology.* The sample sizes described here range from eight to fourteen. While the researcher sought to collect data until saturation was reached, a preliminary desired sample size of a minimum of nine coaches was put forth prior to recruitment. This number was also influenced by the researcher's goal to recruit one participant from each of the nine U.S. Census Bureau Regions.

Upon completing the ninth interview, the researcher utilized a critical friend to help determine that data saturation had been reached and data collection could be concluded. This process is outlined in further detail below regarding trustworthiness.

Procedures

After obtaining Institutional Review Board (IRB) approval, coaches were contacted via email using purposive sampling. Due to the lack of research pertaining to the present topic and that qualitative studies conducted under a generic approach aim to obtain a diverse sample in which a broad range of experiences may be explored (Percy et al., 2015), the researcher sought to obtain a sample that would be as representative of NCAA Division I collegiate coaches as possible. The researcher identified all NCAA Division I teams and entered them into excel files according to which United States Census Bureau region they belong to. There are nine total regions (East North Central, East South Central, Middle Atlantic, Mountain, New England, Pacific, West North Central, West South Central).

The researcher then began recruiting by using a random number generator to randomly select two teams from each region. Once teams were selected, the researcher used each team's website to confirm that the corresponding coach met inclusion criteria. If inclusion criteria were not met, another coach was randomly selected. Coaches were then sent a brief email detailing

what participation in the study would entail, in which the researcher asked that coaches respond to the email if they were interested in participating. Coaches who did not respond after five days were sent a follow-up email. If a coach did not respond within seven days of the initial recruitment email, another coach was randomly selected from the same region to contact. After six weeks of recruitment, the researcher applied for and received IRB approval to increase recruitment due to a low response rate (3%). The researcher obtained approval to contact eight coaches within each region at a time, as opposed to the initial two coaches per region. The researcher discontinued recruitment within a region if two coaches from that region were recruited. The researcher contacted a total of 263 coaches (4% response rate).

Coaches who responded were asked to provide available dates and times to participate in an interview via Zoom. Once a time was agreed upon by the participant and researcher, the participant was sent an email containing information needed to access the scheduled Zoom interview, along with a link to complete a consent form via Qualtrics. The consent form included a detailed description regarding confidentiality and their anonymity in the study, as well as outlined confidentiality risks associated with the use of synchronous technology (American Psychological Association, 2017).

To ensure a more secure method of data collection, the researcher utilized Zoom's passcode and waiting room features which required the participants to enter a unique passcode to access their Zoom call and ensured only the researcher could give permission for an individual to join the call. Findings suggest that not only do research participants have positive experiences being interviewed via Zoom, Zoom also allows the researcher to be more considerate of participant convenience, health, and safety (Gray et al., 2020). All interviews were recorded directly onto the researcher's password protected Zoom account, as well as their password

protected Otter.ai account, a speech-to-text transcription application. Immediately upon receiving access to Zoom recordings and Otter.ai recordings and transcripts, the researcher moved them to a password protected folder on a password protected computer, as well as to a flash drive kept in a locked bag in a locked office. Each recording was listened to by the researcher and any necessary corrections to transcriptions, such as incongruence between words from the recording and words in the transcript, were made.

Each interview began with the principal investigator reminding the participant that they have the right to deny answering any questions and can discontinue their participation in the study at any time. All participants were then asked to choose a pseudonym to be used in place of their name in all further use of data to help ensure anonymity (see Table 1). Involving participants in the choosing of their pseudonym has been found to be a meaningful process for participants in which they can consider their gender, culture, location, and overall meanings for their pseudonym, while also allowing participants to "know themselves in the works that their words have helped to produce" (Allen & Wiles, 2016, p. 14). All participants were made aware when the recording of the call began. Demographic information was then collected verbally prior to beginning the semi-structured interview. A semi-structured interview guide was used to conduct the interview with the participant.

Instrumentation

Semi-structured Interview Guide.

A semi-structured interview guide was used to collect data specific to the research questions put forth (Galletta, 2013). The semi-structured interview guide provided a focused structure for discussion with participants (Kallio et al., 2016) while also allowing the researcher the opportunity to actively respond "to the emerging worldview of the respondent, and to new

ideas on the topic" (Merriam & Tisdell, 2015, p. 111). Creation of the semi-structured interview guide was heavily informed by the mental health prevention framework set forth for coaches by Bissett et al. (2019). The semi-structured interview guide can be found in Appendix A. Example questions included (a) Do you communicate about the topic of mental health with your athletes and if so, how? (b) What do your interactions look like with athletes that you know are experiencing mental health concerns?, and (c) What obstacles or barriers have you experienced to supporting the mental health of your athletes? Additionally, the researcher utilized probes to elicit more information from participants (Barribal & While, 1994.) The use of such probes included those through which the researcher sought to allow for expansion such as, "Tell me more," or "Give me an example of that," as well as those through which the researcher prompted further explanation such as, "Tell me what you mean by that," (DeJonckheere & Vaughn, 2019, p. 6). The interview guide was designed to be approximately 30 minutes in length and went through two phases of pilot testing, which are described below regarding trustworthiness.

Researcher as an Instrument.

Qualitative researchers have been identified as the primary instrument of both data collection and data analysis in qualitative research (Merriam & Tisdell, 2009), which has long presented bias concerns (Mehra, 2002; Poggenpoel & Myburgh 2003). As a current sport and exercise psychology graduate student and mental performance consultant in training, I recognize that I possess biases regarding the importance of the well-being of student-athletes. I also acknowledge that my choice to pursue this area of research was heavily influenced by my desire to ensure that student-athletes receive the mental health care that I feel student-athletes deserve.

In my current role as a mental performance consultant in training, I have worked closely with athletes on topics closely related to their overall well-being. I have also worked closely with

student-athletes that were also experiencing challenges associated with their mental health throughout their time engaging in the consultation process. These experiences have contributed to the high value I place on increasing the availability of and access to mental health resources. I believe in the importance of discussing mental health, along with the importance of providing accessible mental health resources to student-athletes. I have often listened to the lived experiences of student-athletes regarding their mental health, how mental health is addressed within their teams, and the resources available to student-athletes. As a result, I have often felt that there are not adequate and accessible resources available to student-athletes and that the messages being sent to athletes by a variety of stakeholders in sport are not consistent or clear.

As a current consultant in training working with collegiate teams and as a former collegiate athlete themselves, I also recognize I possess biases pertaining to my own experiences with collegiate coaches. I competed within the NCAA and at the club level during my undergraduate career. I witnessed several of my own teammates at both levels of competition face mental health challenges throughout their athletic career. I witnessed some of my teammates have positive experiences regarding the role that their coach played in supporting their mental health, as well as some teammates that did not have positive experiences regarding the role that their coach played in supporting their mental health. As an athlete, I also engaged in discussions with my coaches regarding how they approach mental health on their teams. I have heard coaches say that they do not feel they have the education or resources in order to support athlete mental health. I recognize that these experiences contribute to my belief that education for coaches regarding how to support mental health is lacking. Furthermore, my interpretation of the lack of resources available for coaches influences my feelings that many coaches do not have the tools and education needed to effectively support the mental health of their student-athletes. I

will be taking steps to limit the effect of these biases, which are subsequently outlined regarding trustworthiness.

Data Analysis

A deductive thematic analysis was conducted. In order to conduct the thematic analysis, the process outlined by Percy and colleagues specifically for generic qualitative research (2015) was utilized. Prior to data collection, the researcher created a code book containing various levels (i.e. *level i, level ii, level iii*) of predetermined categories informed by the mental health prevention framework outlined by Bissett and colleagues (2020) as well as literature regarding coaches' perceived roles and barriers associated with student-athlete mental health. The framework outlined by Bissett and colleagues (2020) was used to inform the codebook so that the researcher could explore what recommended behaviors coaches are and are not engaging in.

The researcher began by further familiarizing themselves with the data. After the researcher ensured all transcriptions were accurate, the researcher engaged in multiple readings of each interview transcription and began highlighting any pieces of data that appeared to be meaningfully associated with the predetermined higher order categories. The researcher then reviewed the highlighted data and determined whether or not each data extract was related to the research questions posed by the researcher. Any data not related to the research questions was put aside and stored in a separate file.

Each data extract was then given a code, which represent *level i* in the codebook and include *supportive behaviors, perceived roles,* and *barriers.* The researcher then began sorting the coded data extracts, which will be referred to as meaning units (MUs), into *level ii* categories beginning with *supportive behaviors. Level ii* categories within supportive behaviors include *primary prevention, secondary prevention,* and *tertiary prevention*. Twenty-four MUs were

removed and set aside in a separate file at this point due to either being too general to sort into a category, or due to not fitting the definition outlined for any of the three *level ii* categories. All MUs within each *level ii* category were then sorted into *level iii* categories (see Table 2 for code map of *supportive behaviors*).

The researcher then began identifying MUs within *perceived role* that fit within the *level ii* category, *gatekeeper.* This was the only *level ii* category within *perceived roles* as this is the only role consistently identified in the literature among coaches. After all MUs that fit into *gatekeeper* were sorted, the researcher revisited the remaining MUs, remaining open to new categories. One new category, *direct source of support*, was formed. 11 MUs remained that were not placed into a *level ii* category due to representing perception of a role that three or fewer coaches discussed. These MUs were removed and set aside in a separate file. The researcher discusses these MUs in the discussion section. (see Table 3 for cope map of *perceived role*).

The researcher then moved to *barriers* and began sorting MUs into the three original *level ii* categories. The three original categories were *mental health literacy, attitudes toward mental health and help-seeking,* and *lack of self-efficacy.* No MUs fit the categories *mental health literacy* or *attitudes toward help-seeking,* and the researcher removed these categories from the codebook. The researcher then revisited the remaining MUs, remaining open to new categories. Three new categories were created including *insufficient resources, not knowing student-athlete mental health status,* and *athletes themselves.* Twelve MUs remained that were not placed into a *level ii* category due to representing a barrier experienced by only one or two coaches. The researcher removed and set these MUs aside in a separate file and discusses these MUs in the discussions section. A critical friend was utilized throughout the process of data analysis, which is described in further detail regarding trustworthiness.

Trustworthiness

Pilot Testing

The semi-structured interview guide was piloted through the use of expert assessment and field testing (Kallio et al., 2016). Pilot testing "can help investigators begin to address instrumentation and bias issues" (Chenail, 2011, p. 257) by providing the researcher with the opportunity to assess if the interview questions effectively prompt the participants' experiences and perceptions (Barriball & While, 1994; Chenail, 2011), ask for feedback regarding the clarity of questions, determine how much time will be needed to conduct the interview (Chenail, 2011), and detect any other potential flaws in the structure or content of the interview (Chenail, 2011; Turner, 2010). The interview guide was first pilot tested with an individual outside of the research team who served as the "expert in the field." This individual has experience coaching at the Division I level, as well as extensive applied experience working as a full-time mental performance consultant. Minor changes were made to the wording of questions at the completion of the pilot test in an effort to avoid leading coaches and to enhance clarity of the questions. For example, "How do you communicate and/or engage with athletes that you know are experiencing mental health concerns?" was changed to, "What do your interactions look like with athletes that you know are experiencing mental health concerns?" The interview guide was then pilot tested with a second individual currently coaching at the Division I level. No further changes were deemed necessary at the completion of this pilot test. Data collected during pilot testing was not utilized in any further manner throughout the course of this study.

Member Reflections

All participants were provided the opportunity to engage in member reflections (Tracy, 2010). Member reflections differ from member checking as the researcher does not seek to verify

their results through member reflections. Instead, the researcher seeks to allow for expansion of participant insight in order to increase the richness and robustness of the results (Smith & McGannon, 2018). After the researcher began coding the data, participants were contacted via email to ask if they would be willing to engage in the process of member reflections via phone or video-communications service. Six participants agreed to participate in member reflections, and all six participants chose to engage in the process via phone.

During these phone calls, participants were provided the opportunity to discuss the researcher's interpretations of data. The researcher summarized various initial interpretations of the data, followed by asking participants questions such as, "Is this interpretation something that resonates with your experience?" or "Does the wording I used to summarize this idea seem to accurately represent your experience?" For example, the researcher explained their interpretation that not knowing an athlete's mental health status served as a barrier to supporting student-athlete mental health and asked participants to share what they thought of this interpretation related to their own experience. The process of member reflections created opportunity for participants to reflect on and explore potential contradictions of the results (Smith & McGannon, 2018) through "questions, critique, feedback, affirmation, and even collaboration" (Tracy, 2010, p. 844). The researcher was also able to determine that participants found the researcher's interpretations both clear and meaningful (Tracy, 2010). Member reflection phone calls lasted between five and fifteen minutes.

Critical Friend

A critical friend was used to assist the researcher in limiting any researcher biases throughout the process of data analysis. Smith and McGannon (2019) explain that the role of a critical friend is "to provide a theoretical sounding board to encourage reflection upon, and

exploration of, multiple and alternative explanations and interpretations" (p. 113). The critical friend may challenge the researcher's interpretations, as well as promote further reflection upon the distinctness and content of their interpretations through questioning. The researcher's critical friend had experience conducting qualitative research within the field of sport and exercise psychology and was not present for or involved in any part of the study design, data collection, or initial data analysis.

The critical friend was first utilized to aid in determining if data saturation had been reached. After the researcher conducted the ninth interview and listened to each interview to make any necessary changes to the interview transcripts, the researcher presented the critical friend with each of the nine transcripts. The critical friend read each of the nine transcripts. When reading the ninth transcript, the critical friend asked the researcher questions about the participant's responses, pointing out any pieces of data that may have appeared new or unique. After discussing these pieces of data, the critical friend and researcher agreed that nothing new or unique related to the research questions had been presented in the ninth interview. The researcher concluded recruitment and data collection at this point.

The critical friend was utilized a second time after the researcher completed initial coding of all nine interviews. The critical friend examined the MUs within the *level i* and *level ii* categories and asked the researcher questions pertaining to why they placed MUs within specific categories. The researcher utilized this process of questioning to examine if their biases were influencing their interpretations as well as to aid in examining the data from a different perspective. The critical friend was utilized a third time upon the creation of categories that were not originally in the researcher's codebook. The critical friend was used to aid in ensuring new categories accurately represented the MUs within them, as well as to clarify the definitions of

each new category. For example, the critical friend aided in refining a *level ii* category within *barriers.* The researcher originally created the category, *lack of support staff.* Through questioning, the critical friend pointed out that in two MUs, participants were really referring to a lack of time as a barrier and that in removing these two MUs, the category consisted of only the experiences that resources on campus, and not within coaching staff, were not sufficient. Therefor, the two MUs were removed and the category was renamed *insufficient resources.* The critical friend also reviewed the MUs within *perceived role* and *barriers* that were not placed in a *level ii* category and to ensure the MUs did not fit the definition of a category or require a new category be formed.

Table 1

Participant Demographic Information

Coach	Age	Region	Team	Years as DI Coach
Jimmy	58	West North Central	M/W Golf	26
Birdy	40	East North Central	W Golf	15
Ash	35	New England	W Soccer	12
Jake	48	New England	M/W Rowing	16
Wes	40	Middle Atlantic	M/W Track & Cross Country	16
Cleves	27	East South Central	M/W Track & Cross Country	4
Sarah	38	West South Central	W Swimming	14
Ted	40	West North Central	M/W Cross Country	3
Lynn	43	Mountain	M/W Track & Field	10

Note. Coach column represents pseudonyms. M=Men's, W=Women's

Table 2

Code Map of Analysis for Engagement in Supportive Behaviors

level i	*level ii*	*level iii*
Supportive behaviors (MU=91, C=9)	Primary prevention (MU=30, C=8)	Communicating one's role and responsibilities (MU=5, C= 4)
		Communicating value/importance of help-seeking (MU=14, C=7)
		Enlisting stakeholder support (MU=4, C=3)
		Modeling value-consistent behaviors (MU=2, C=2)
		Reinforcing athlete behaviors consistent with desired team culture (MU=5, C= 3)
	Secondary prevention (MU=51, C= 9)	Attending to changes in athlete behaviors (MU=20, C=8)
		Communicating coaches' boundaries (MU= 3, C=3)
		Providing information for local support sources (MU=10, C=7)
		Engaging with athlete and initiating protocol (MU=18, C=9)
		In emergency situations, contacting emergency services MU=2, C= 2)
	Tertiary prevention (MU=14, C= 8)	Providing reinforcement to athletes (MU=2, C=2)
		Respecting athlete's desired levels of coach involvement (MU=9, C=5)
		Expressing willingness to modify sport-related demands (MU=9, C=3)

Note. MU= Meaning units, C=Coaches that contributed an MU to the associated category.

Table 3

Code Map of Analysis of Coaches' Perceived Role

level i	*level ii*
	Gatekeeper (MU=11, C=8)
Perceived role (MU=22, C=9)	Direct source of support (MU=11, C=7)

Note. MU= Meaning units, C= Coaches that contributed an MU to the associated category.

Table 4

Code Map of Analysis of Barriers to Supporting Student-Athlete Mental Health

level i	*level ii*
Barriers (MU=35, C=9)	Lack of self-efficacy (MU=11, C=7)
	Insufficient resources (MU=9, C=4)
	Not knowing student-athlete mental health status (MU=9, C=4)
	Athlete (MU=6, C=6)

Note. MU= Meaning units, C= Coaches that contributed an MU to the associated category.

CHAPTER 3

RESULTS

The following results are organized according to the research questions. Results

regarding the first research question, "What are coaches doing to support student-athlete mental

health?" will be presented first, followed by, "How do coaches perceive their role in supporting

student-athlete mental health?" and "What barriers do coaches face to supporting student-athlete

mental health?" Each section will include category definitions, the number of MUs within each

category, the number of coaches that contributed an MU to each category, and examples of MUs

within each category.

Supportive Behaviors

The level (*level i*), *supportive behaviors,* was used to aid in the organization of the

specific types of supportive behaviors outlined by Bissett and colleagues (2020) and represents

the initial code given to each data extract in which coaches indicated engaging in a behavior

supportive of student-athlete mental health.

After analyses were complete, this level evidenced 91 MUs from all nine participants,

meaning participants reported engaging in behaviors supportive of mental health consistent with

the mental health prevention framework 91 times. This level consists of three *level ii* categories

including *primary prevention*, *secondary prevention*, and *tertiary prevention*. Two of the *level ii*

categories (*primary prevention* and *secondary prevention*) are comprised of five *level iii*

categories, and one of the level ii categories (*tertiary prevention*) is comprised of three *level iii*

categories. Each *level iii* category represents a specific supportive behavior. While within the

framework outlined by Bissett and colleagues (2020) primary prevention includes thirteen

specific behaviors, secondary prevention incudes seven specific behaviors, and tertiary

prevention included six specific behaviors, Bissett and colleagues have condensed each of these

levels of prevention into five summative behaviors (see Figure 2 for summary of behaviors). In

order to promote a concise and clear results section, the *level iii* categories include only the

summative behaviors outlined by Bissett and colleagues (2020). The code map for *supportive*

behaviors lists *level iii* categories in the order they are listed in the prevention framework.

Because no coaches expressed engaging in two of the five summative behaviors within *tertiary*

prevention, only three are discussed.

Primary Prevention

This *level ii* category contains 30 MUs from eight participants. This category, also

referred to as "Culture Setting" is defined as engagement in behaviors that aim to reduce mental

illness occurrence by making changes to the environment and providing individuals with coping

skills/resources (Bissett et al., 2020). This category is comprised of five *level iii* categories, each

of which represent engagement in a specific behavior. While all coaches indicated

communicating about the topic of mental health with their student-athletes, the ways in which

coaches indicated communicating about mental health differed from coach to coach.

Communicating Coaches' Role and Responsibilities. This category is defined by

engagement in communicating one's role and responsibilities in supporting mental health to

student-athletes (Bissett, 2020). This category includes five MUs from four participants. Several

coaches described engaging in this behavior when discussing their efforts to make clear that they

want their athletes to communicate with them if they are struggling. Lynn stated that she has told

her athletes directly, "I want you to call me day or night if you know, if you have an issue."

Birdy described engagement in this behavior more specifically, stating, "I think that's something

that's really helped me as well is like working with student-athletes and counselors, like creating those boundaries and like setting those expectations ahead of time."

 Communicating Value/Importance of Help-Seeking. This category is defined by engaging in communication of the value and importance of engaging in help-seeking behaviors to student-athletes (Bissett et al., 2020). This category includes 14 MUs from seven participants. Engagement in the process of communicating the value or importance of engaging in help-seeking behaviors to athletes was endorsed in a variety of ways. Several coaches described attempting to communicate with athletes in a way that would normalize engaging in help-seeking behaviors. For example, Birdy stated telling her athletes directly, "'This is how you can set up appointment, you know, everyone does you know, so it's great for everyone to be seeing someone and talking to someone sometimes.'" Ash described attempting to discuss the topic of mental health "in just like a casual kind of conversation to make them know it's not scary or intimidating." Wes described,

> "I try not to use the cliché like 'reducing the stigma,' but just saying, 'Hey, everybody's doing this now so you don't want to be left behind,' you know. Kind of making it almost like, I don't know if this sounds weird but like a competitive advantage like, 'If you're not doing it, everybody else is doing it, so if you're struggling, you should be doing it too.' So I think normalizing it in that way."

Several coaches also discussed highlighting the benefits of help-seeking. Ted stated, "I use examples of professional athletes or people that would be their mentor, that you know, their idols or people that are like, 'Hey, this is, this is normal practice in our world if you want to be the best you can be.'" Lynn stated, "I've often told them, 'If this is better, everything else is going to be better. So we've got to make time for it.'"

Enlisting Stakeholder Support. This category is defined by enlisting stakeholder support, such as members of a sports medicine team, to promote the importance of engaging in help-seeking behaviors to student-athletes (Bissett et al., 2020). This category contains four MUs from three participants. All three participants described utilizing a member of support staff, such as a counselor or sport psychologist, to speak to their teams about mental health and help-seeking. Ash described, "Our sport psychologist comes in and kind of just does an overview of that, and then talks about how he can help them in sport. But he always has you know, 'These are the resources, this is where you can go on campus, this is where it's private.'"

Modeling Value Consistent Behaviors. This category is defined by modeling behaviors consistent with one's desired team culture (Bissett et al., 2020). In the prevention framework, Bissett and colleagues (2020) add that this behavior may include refraining from engaging in the use of stigmatizing language or modeling healthy self-care behaviors. This category contains two MUs from two participants. Ted discussed a training he attended and how it impacted the language he uses when speaking with his athletes, explaining that he prefers the term mental wellness, "The entire thing was on mental health and mental wellness, and that was one of the big things that came out of it. We talk about mental wellness, it doesn't have a stigma to it. We talk about mental health, people always shy away from that term."

Reinforcing Athlete Behaviors Consistent with Desired Team Culture. This category is defined by reinforcing athlete behaviors that are consistent with a team culture that is supportive of mental health and help-seeking (Bissett et al., 2020). This category contains five MUs from three participants. Each participant discussed engagement in this behavior slightly differently. Cleves described trying to reinforce a positive team culture by reminding athletes to be mindful of the way they treat one another during particularly stressful times. One participant, Birdy,

discussed actively prioritizing behaviors she feels are supportive of mental health, sharing, "Our team does a 10-minute meditation before we start any practice."

Secondary Prevention

This *level ii* category is comprised of 51 MUs from all nine participants. This category, also referred to as "Identification and Referral" is defined by engagement in behaviors that seek to shorten the duration of which mental health concerns are experienced through early identification and direction to appropriate resources that can provide treatment (Bissett et al., 2020). This category is comprised of five *level i* categories, each of which represent a specific behavior.

Attending to Behavior Changes. This category is defined by attending to behavior changes in student-athletes that may indicate the emergence of a mental health concern (Bissett et al., 2020). This category contains 14 MUs from six participants. Participants discussed their efforts to attend to behavior changes in student-athletes in a variety of ways. Two coaches discussed their use of other members of support staff to check-in on athletes in order to attend to changes that the coach themselves may not recognize. Lynn stated, "It might also be to ask our health and wellness coach like, 'If you're in the weight room, like, can you ask them how they're doing?'" Ted discussed utilizing surveys on his team to aid in monitoring changes in athletes, describing that his athletes "turn in weekly running logs and in those running logs they have to score themselves mentally, physically, emotionally, like how they're feeling overall. So only you can pick up on that right away."

Other coaches described engaging in this behavior in a more general sense, utilizing everyday conversation to check in with their athletes. Examples included Cleves stating, "I try to check with each of my athletes um at least once, twice a week you know, having one on one

conversations that, that I can get a feel of how everybody is," and Lynn stating, "When we're talking about performance, 'Okay, how did you do this weekend and how are you feeling mentally, physically, you know, burnout wise?'"

Communicating One's Boundaries. This category is defined by communicating one's boundaries to student-athletes regarding what one can and cannot when a mental health concern is shared by an athlete or suspected by the coach (Bissett et al., 2020). This category contains three MUs from three coaches. Coaches described engagement in this behavior upon an athlete sharing that they are struggling. Jake described, "I would just point out that anything that I have is not professional, it's experiential and that I'm willing to go as far as I feel capable of doing, but they, you know, an athlete will always be better served going to a professional." Lynn similarly described this behavior and her efforts to communicate what she can and cannot do, stating,

> "And I try to say, 'Hey, I have resources and I'm here for you to support you through this. But I'm not, we need more support, we need more resources. So you can come and you can talk with me when something's going on, I'm here and available. But a counselor can really work with you one on one, and they're doing this professionally. That's their expertise. So now we got two people supporting you through some of those mental health challenges.'"

Providing Athletes with Information for Local Support Sources. This category is defined by providing student-athletes that may be experiencing a mental health concern with information regarding local support sources (Bissett et al., 2020). This category contains 10 MUs from seven participants. Some coaches described providing athletes with information needed to get in touch with local support sources, such as when Wes described that when providing athletes

with information about the counseling center on campus, he may "send them a text or an email with the counseling center information or email addresses of who to contact." Some coaches described sharing information about local support sources that may make an athlete feel more comfortable accessing resources. Sarah shared,

"One of my go-tos is there's one counselor in the department that I know used to be a track athlete and she's still a competitive weightlifter and so, she's always like, 'See if you can get in with [name].' Yeah, I think it's that, because I know just having that connection, you know, kind of going in with a stranger just helps build that."

Engaging with Athlete and Initiating Protocol. This category is defined by coaches engaging with a student-athlete they suspect may be experiencing a mental health concern to inquire how they are doing and following protocol specific to their university or team (Bissett et al., 2020). This category contains 22 MUs from all nine participants. This behavior was the most frequently reported engaged in behavior by coaches among all three levels of prevention. When asked what she would do if she suspects an athlete may be struggling, Ash described,

"If it's just me noticing it, I would go immediately to our health and wellness specialists and just kind of say, like, I'm a little concerned, like, what do you think? And then usually I'll just casually ask them how they're doing and kind of see if I can get any red flags. Or if I just have a meeting, you know, 'Was class stressful, or your boyfriend or girlfriend, you know, having issues?' You know, kind of try and ask them how life's going."

Ted described, "It's just a quick conversation like, 'Hey, just a check in.' And if I feel like there's additional check ins needed, we'll use Academic Services, our support staff there, or again like I said, sports med or counseling services to provide additional support." It is important

to note that there are likely differences in protocol at each university, meaning that coach engagement in this level of behavior may look different depending on the coach.

In Emergency Situations, Contacting Emergency Services. This category is defined by coaches contacting emergency services if an athlete may be a threat to themselves or others (Bissett et al., 2020). This category contains two MUs from one participant. Ash described engagement in this behavior when discussing barriers to supporting student-athlete mental health. Ash stated, "I think that is very challenging, especially when the situation is maybe alarming to a point of harm, where you're fearful for a kid's life, right? And, again, you can take the initial actions to get any, the police there and the health safety people there. After that, you're kind of in the dark."

Tertiary Prevention

This *level ii* category, also referred to as "Treatment Adherence" contains 14 MUs from eight participants, making up just 15% of the data within the *level i* category, *engagement in behaviors supportive of student-athlete mental health.* This category is defined by engagement in behaviors that seek to encourage treatment adherence among individuals currently seeking professional help (Bissett et al., 2020). While the framework outlined by Bissett and colleagues (2020) contains five summative behaviors within this level of prevention, only three behaviors were described by coaches. Therefore, this category is comprised of three *level iii* categories.

Providing Reinforcement to Athletes. This category is defined by coaches providing reinforcement to student-athletes that are currently seeking help for a mental health concern (Bissett et al., 2020). This category contains two MUs from two participants. Ted described speaking with an athlete that had previously shared that they were seeking help for mental health concerns, "We had an athlete like that yesterday like, 'Hey, are you still meeting with [name]

regularly?' 'Yeah, I meet with him once a week.' 'Perfect, keep that going. Seems like it's working.'" It is important to note that engagement in this behavior can only occur if coaches are aware that an athlete is seeking mental health care.

Respecting Athlete's Desired Levels of Coach Involvement. This category is defined by coaches respecting a student-athlete's desired level of coach involvement in discussing and supporting one's mental health care (Bissett et al., 2020). This category contains nine MUs from five participants. Engagement in this behavior most often took place through a process of asking athlete's directly what they want or need from the coach. Jake shared, "If I know they're going to seek professional help, I've just like, I know it's not for me to say, 'So what'd you talk about?' It's like, you know, 'How are you doing, are you still going? Are you getting benefit from it? Are you not getting benefit from it? If you're not, is there anything else we can do?' Sarah described "asking what do they need, what you know, is helpful from out standpoint?" This behavior was also engaged in by coaches acknowledging that they do not need to know the details of a student-athlete's help-seeking and communicating to athlete's that they are willing to fill whatever role the athlete prefer. Wes shared, "They're seeing a professional and I don't really ask if they're, what's going on, but if they want to tell me and I can say, 'Hey, any way I can help you, I will be more than happy to do it.'"

Expressing Willingness to Modify Sport-related Demands. This category is defined by coaches expressing willingness to modify sport-related demands for student-athletes that are currently seeking mental health care (Bissett et al., 2020). This category contains three MUs from three participants. Lynn discussed the balancing act that accompanies engagement in this behavior: "I can't say, 'Hey, you get to miss practices all the time because you're, you're struggling.' I mean, I have had people go home this semester. I've had people that have been

struggling to where they're completely removed from classes and school. It's been that extreme. So obviously, they're not being expected to do what everyone else is here with classes or those things, there are exceptions to it." Birdy directly described expressing willingness to athletes to modify their practice times as needed.

Perceived Role

This level (*level i*) was used to aid in organization of specific roles perceived by coaches in supporting student-athlete mental health and represents the initial code given to any data extract in which coaches discuss perception of their role in supporting student-athlete mental health. This level is comprised of 22 MUs from all nine participants. This *level i* category consists of two *level ii* categories.

Gatekeeper

This category consists of 11 MUs from eight participants. This category is defined as perception of a role that is largely exclusive to providing referrals to mental health resources. This involves the perception that one's responsibilities end once a referral is made. Jake stated, "I can only do what I feel comfortable doing and then just guide them to go where they would be better served." Both Wes and Ash described their lack of involvement after providing a referral. Wes stated, "I would suggest them to the Counseling Center, and maybe even send them a text or email with the Counseling Center information or email addresses of who to contact. The problem is, that's kind of where it stops though." Ash stated, "I do think the hardest thing is you can lead the horse to water, but you have no nothing to do after that, right?" Ted described,

> "So I almost see myself as a bridge. And I'm not, I'm not an expert, like this is something
> I care about but I don't know, like I know enough taking grad level sports psychology
> classes, but that's, that's just enough to like not be an idiot. And so then putting them in

contact in the right places to get the help that they need that's beyond a, so I can be a

bridge."

Source of Direct Support

Eleven MUs from seven participants comprise this *level ii* category. This category is

defined as a perception of a role that goes beyond providing a referral to mental health resources.

Coaches described perceiving this role when discussing their role as one that involves listening

to, encouraging, following up with, and directly supporting an athlete that is struggling. Lynn

described that after directing a student to a counselor, "I'm going to support you in what it is

you're learning and growing with there and still struggling with here." Jake discussed a situation

in which an athlete might not feel comfortable seeking professional help in which he tries to

provide direct support: "If it's a choice between working with me who they feel comfortable

with and working with someone else who is experienced, who does have the training, but they're

not ready for it yet, you know, I'm willing to fill in the role as best I can." Wes discussed, "I'm

just trying to stay in touch with and encourage and um be very positive with and so I guess I see

that as kind of my role."

Barriers

This level (*level i*) was used to aid in the organization of specific barriers to supporting

student-athlete mental health experienced by coaches and represents the initial code applied to

any data extract in which a coach discussed an obstacle or barrier to supporting student-athlete

mental health. This level is comprised of 34 MUs from all nine participants. This level is

comprised of four *level ii* categories including *lack of self-efficacy*, *insufficient mental health

resources*, *not knowing a student-athlete's mental health status*, and *athletes themselves*.

Lack of Self-Efficacy

This category is comprised of 11 MUs from seven participants. This category is defined by coaches' experience that a lack of confidence and/or ability needed to effectively engage in behaviors supportive of student-athlete mental health is a barrier. Three coaches described experiencing difficulty supporting student-athletes due to not knowing what the proper protocol or course of action is. Sarah stated, "As a coach, we care. We want to be there. We want to help, but we're really not equipped you know. We don't have the training to do it and I think that's an area that could, could grow. Whether it be a very surface level coaches' training knowing, 'Hey, when this scenario happens, where's a good route to go or direct,' or you know that kind of thing." Several coaches described challenges supporting student-athletes associated with not knowing the best way to achieve balance in their role supporting student-athletes. Wes described,

"That's the hard balance of, okay, you're just the coach, you can only do so much, yet you hear things of these horror stories about what happens in other programs and, 'You should've done more, you should've done more, you should've done more.' And you're just kind of in this strange middle place sometimes where you want to do everything you can to help, but you also aren't the professional in this situation. You're not the expert and you can only go so far. So what is not doing enough and what is going too far? And that's a hard line. I don't have that defined."

Jimmy echoes the idea of finding balance, saying, "It's difficult. First of all because I don't want to show favoritism towards them I guess, and I don't want to shun them out either. So it is a difficult line to walk in." Birdy said, "They're high level athletes and high-level students, and there's a lot of stress. So it's like, how do you keep the um, the drive and expectation high without sacrificing their mental health?"

Insufficient Resources

This category is comprised of 9 MUs from four coaches. This category is defined by coaches' experiences that insufficient campus resources are a barrier to supporting student-athlete mental health. Three of the four participants specifically refer to not having enough mental health resources to serve student-athletes that are struggling. Wes stated:

> "I'm a firm believer there probably, you know, you have 10 athletic trainers, you probably should have 10 mental health counselors. So I believe that pretty pretty strongly. So I guess you know, it'd be nice to have a few more. I wish there was more funding for that. I think if there was more funding for that, you know, maybe we just have less issues overall in society, but definitely in college sports. Now, if you had some more mental health counselors and coaches could like, instead of, because a lot of this falls on coaches, you know, and it really shouldn't. It should not, you know, but who else is it going to fall to in some ways?"

Ted described experiencing this barrier despite feeling that his university has excellent resources. He stated, "Our resources here are better than most. Our mental health counselors and our support staff here, they're just overworked. There's just so much going on right now, like I don't know how many people we have, but we could have double that." Sarah described experiencing this barrier in regard to lacking resources that are specifically for student-athletes. In referring to university counseling services, she stated, "They're used to the majority of students that, they may not struggle with the same area of you know, being the student-athlete, kind of being put on a pedestal. This pressure that they put on themselves, plus coaches, plus administration that they really dealt with most of their life. I think sometimes that's a little tough to relate to."

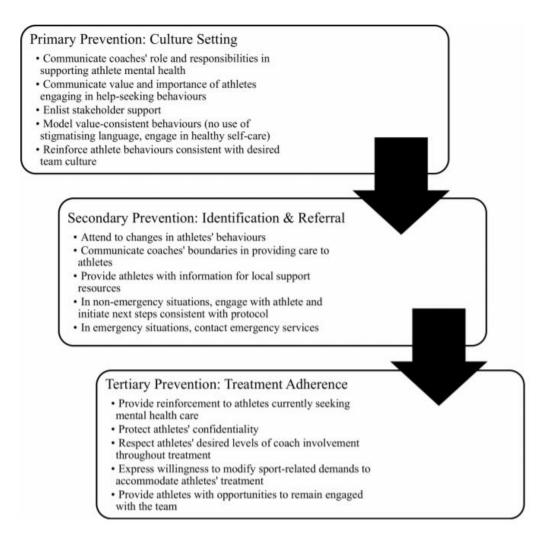*Not Knowing a Student-Athlete's Mental Health Status*

This category is defined by coaches' experience that not being aware of whether or not a student-athlete is seeking help and what such help looks like serves as a barrier to supporting student-athletes. This category contains 9 MUs from four participants. Sarah described this barrier in a general sense, stating, "I think the not knowing is probably the biggest barrier." Birdy discussed that sometimes student-athletes will choose to "release," meaning that the coach may be privy to information related to an athlete's mental health treatment. She discussed, "I guess that comes with sort of like the release, like if the student-athlete doesn't want to release then, then it becomes a little but harder. Because I don't know like, they could have been at the hospital two days ago, right, and you don't know that, they have a right to keep that a secret."

Athlete Themselves

This category contains six MUs from six participants. This category is defined by a coaches' experience of a student-athlete's behavior serving as a barrier to supporting them. For example when asked what barriers they have faced to supporting student-athlete mental health, Birdy described, "just a student-athlete's not open at all to any help," and Sarah described, "just the sense that they do have control of it, they're, you know, they don't see it as a problem." Ash described this barrier when discussing the fear some athletes have pertaining to seeking help:

> "I think that stigma still deters kids from like, it's a weakness, right? 'You're not as good of an athlete.' 'My coach might not play me because they think I'm gonna choke,' or whatever. Or, 'I'm gonna lose it if I'm the kid that lost the game.' And so I think that's probably the biggest challenge is there's just like always back of the mind fear factor for the kids."

Figure 2

Summary of Supportive Behaviors (Bissett et al., 2020)

Primary Prevention: Culture Setting
- Communicate coaches' role and responsibilities in supporting athlete mental health
- Communicate value and importance of athletes engaging in help-seeking behaviours
- Enlist stakeholder support
- Model value-consistent behaviours (no use of stigmatising language, engage in healthy self-care)
- Reinforce athlete behaviours consistent with desired team culture

Secondary Prevention: Identification & Referral
- Attend to changes in athletes' behaviours
- Communicate coaches' boundaries in providing care to athletes
- Provide athletes with information for local support resources
- In non-emergency situations, engage with athlete and initiate next steps consistent with protocol
- In emergency situations, contact emergency services

Tertiary Prevention: Treatment Adherence
- Provide reinforcement to athletes currently seeking mental health care
- Protect athletes' confidentiality
- Respect athletes' desired levels of coach involvement throughout treatment
- Express willingness to modify sport-related demands to accommodate athletes' treatment
- Provide athletes with opportunities to remain engaged with the team

CHAPTER 4

DISCUSSION

The purpose of the current study was to explore Division I collegiate coaches'

experiences supporting student-athlete mental health, along with their associated perceived roles

and barriers. Examining the ways in which coaches support student-athlete mental health using

the framework outlined by Bissett and colleagues (2020) allowed the researcher to identify what

areas of support coaches are and are not engaging in, which may aid in informing future

resources for coaches. Major findings pertaining to coaches' experiences supporting student-

athlete mental health along with limitations will be discussed in this section. Practical

recommendations and directions for future research are also provided.

General Discussion

Participants reported engaging in many supportive behaviors similar to those outlined by

Bissett and colleagues (2020). Coaches most frequently reported engaging in secondary

prevention behaviors, which primarily included behaviors related to identification and referral

practices. Secondary prevention is the only level of prevention that all nine coaches indicated

engaging in. Despite coaches most frequently discussing engaging in behaviors at the level of

secondary prevention, one behavior, engaging with athletes and initiating protocol, comprised

nearly half of the engagement at this level. The high level of engagement in this specific

behavior is consistent with literature that has identified coaches' perception of their role as a

gatekeeper to other sources of support (Biggin at al., 2017; Mazzer & Rickwood, 2015), as

engaging with athletes and initiating protocol most often took place in the form of approaching

an athlete and providing a referral to a mental health professional. The low level of engagement

found at the level of tertiary prevention is also consistent with the identification of coaches'

perception of their role as a "gatekeeper" identified in the literature and in the present study.

The second most engaged in level of prevention found among coaches was primary

prevention, with the most engaged in behavior being communicating the value and importance of

athletes engaging in help-seeking behaviors. Similar to the secondary level of prevention, there

were several behaviors that three or fewer coaches discussed engaging in. For example, just four

coaches discussed the process of communicating their role in supporting mental health to their

student-athletes. While all coaches indicated that they do discuss the topic of mental health with

their athletes, the information discussed and how it is presented varied from coach to coach.

Because of the potential role coaches have in influencing team culture (Schroeder, 2010) and the

finding that many athletes want their coaches to communicate openly with them about mental

health (Biggin et al., 2017) speaking with athletes about mental health and help-seeking can

potentially be an extremely beneficial behavior. However, it appears likely that student-athletes

are not receiving consistent information from their respective coaches and that coaches often are

left to determine on their own how to discuss this topic among their teams. Authors examining

the provision of mental health services to student-athletes have similarly highlighted that because

universities are able to determine themselves how to implement NCAA recommendations

regarding mental health services, every single NCAA affiliated institution may providing support

in a different way (Moore, 2016a). Without a consistent and clear set of guidelines and protocol

for coaches, athletes will likely continue to receive support in different ways from their

respective coaches.

How mental health is discussed by coaches' may be influenced by how confident or

comfortable a coach feels discussing such topics. Researchers examining coaches' experiences

associated with body image in sport found that many coaches did not feel comfortable communicating about student-athlete concerns related to body image (Sabiston et al., 2020). Additionally, even coaches that have reported having confidence discussing mental health with their athletes have expressed fear that they may say the "wrong" thing when doing so (Mazzer & Rickwood, 2015). It may be important to determine if a coach's degree of confidence discussing mental health is influenced by the skills they feel they have, the comfort they have in discussing such topics, or both.

An additional finding was that the majority of coaches reported engaging in behaviors they felt were supportive of student-athlete mental health that were not among any of the behaviors in the mental health prevention framework. Specifically, 24 MUs referred to engagement in behaviors that are not among those recommended to coaches. This finding raises the concern that coaches may be engaging in behaviors that are not congruent with supporting student-athlete mental health and could potentially be deterring student-athletes from seeking help. It may also suggest that coaches are lacking clarity regarding what behaviors to engage in to support student-athletes. Researchers examining high school coaches found that coaches were more likely to provide mental health support to student-athletes if they had knowledge of their school's mental health protocol (Kroshus, Chrisman, et al., 2019). Providing coaches with clear guidelines regarding what they can do to support student-athlete mental health may be an important piece to ensuring coaches are equipped to support their student-athletes.

To date, few if any studies have been published in which collegiate coaches' roles in supporting student-athlete mental health were explored. The role of "gatekeeper" has, however, been identified consistently in the literature among other populations of coaches (Biggin at al., 2017; Mazzer & Rickwood, 2015). The current study identified that the majority of coaches

perceived this role, consistent with the literature. However, five coaches reported perceiving the role of both *gatekeeper* and *direct support source*, which appear to contradict one another. This potential experience of role confusion among coaches has been highlighted in the literature (Biggin et al., 2017). It is important to note that the perception of multiple roles may be because coaches perceive their role differently depending upon the situation that they are in. The researcher was unable to identify any patterns related to what coaches feel their roles are and when, though this may be an area worth exploring in the future.

It also appears that coaches could benefit from having their role in supporting student-athlete mental health clearly defined so that they are not left to determine what that role is for themselves. While not enough coaches discussed experiencing role ambiguity to justify forming a category, multiple coaches indicated that they lack a clear understanding of their role. Additionally, many coaches referred to their role being dependent on what they feel they can handle or are comfortable with, suggesting that coaches' perceived roles are largely dependent on their degree of self-efficacy, supporting the identification of a lack of self-efficacy as a barrier in the current study and the existing literature (Kroshus, Chrisman, et al., 2019).

It is important to highlight the 11 MUs that were removed from coding due to not fitting into a defined category within coaches' perceived roles. Examples of roles perceived by coaches among these 11 MUs includes those of a parent, "just a coach," and holding athletes accountable. These MUs were contributed by five participants, meaning that many coaches perceived more than one role in supporting student-athlete mental health. Furthermore, some coaches perceived having a role that no other coach identified. This finding highlights the inconsistency in coaches' perceptions of their roles and responsibilities in supporting student-athlete mental health. This finding is congruent with the level of engagement discussed in the behavior of communicating

one's role and responsibilities to student athletes (MU=5, C=4), and coaches communicating boundaries in providing care to athletes (MU=2, C=2). In order for coaches to communicate their role and responsibilities in supporting student-athlete mental health, they must clearly understand what their role and responsibilities are.

Additionally, many coaches verbalized that they are not mental health professionals before discussing the roles they perceive having in supporting student-athlete mental health. Coaches often pointed out that they are not equipped to support student-athletes, which is a finding consistent with literature on coaches' perceived roles (Biggen et al., 2017). It is important that coaches understand that they do not need to provide support at a professional level or engage in any degree of counseling in order to support their student-athletes. This further indicates a potential lack of awareness or understanding regarding what coaches can do to support student-athletes and is in alignment with the finding that coaches desire training and education pertaining to student-athlete mental health (Hegarty et al., 2018; Sherman et al., 2005).

It is also important to discuss the changes to the codebook pertaining to barriers, as *self-efficacy* was the only original category that remained after analysis of the MUs in *barriers.* The original categories within *barriers* were informed by the barriers targeted in mental health education for coaches. However, the barriers targeted in mental health education for coaches are not based on literature in which coaches reported barriers they face. The findings of the present study do not suggest that mental health literacy and one's own personal attitudes toward help-seeking are not barriers to supporting student-athlete mental health experienced by coaches. They do, however, suggest that there may be additional barriers that coaches are facing that may need addressed in future education for coaches. For example, the perception of not knowing a student-athlete's mental health status as a barrier, could be addressed. Literature examining

coach support of injured athletes has also identified the perception among coaches that athlete's not being honest about their experience or opening up to the coach serves as a barrier (Maurice et al., 2021). It is important for coaches to understand that whether or not an athlete shares their experience may be heavily influenced by their perception that struggling with mental health or seeking-help may be perceived as weak by their teammates or coaches (Lopez & Levy, 2013; Moore, 2017). In this way, education may further emphasize the importance of how coaches can speak to their athletes about mental health and reinforce behaviors consistent with an environment supportive of help-seeking to combat this barrier.

It is important to note the twelve MUs removed from *barriers* due to not fitting the definition of any of the four *level ii* categories. Examples of barriers referred to within these MUs include not personally ever struggling with mental health, the COVID-19 pandemic influencing coach-athlete relationship building, and lack of time. It is likely that coaches will continue to experience barriers unique to themselves and their present experiences. While it is not feasible for coach education to provide resources to address every possible barrier coaches may face, it may suggest the further need to ensure coaches' have the self-efficacy needed to engage in supportive behaviors despite individual challenges they may face. While not examined among collegiate coaches, the role of self-efficacy in determining coach engagement in supportive behaviors has been identified. In a study examining high school coach support of student-athletes experiencing anxiety and depression, results showed that coaches with greater confidence related to supporting their athletes were more likely to engage in supportive behaviors (Kroshus, Chrisman, et al., 2019).

Coaches' own attitudes toward mental health and help-seeking have been identified as a potential barrier to engaging in behaviors supportive of student-athlete mental health. It has been

suggested in the literature that this may be because of the messages coaches are sent as athletes pertaining to help-seeking (Kroshus, Wagner, et al., 2019). For this reason, the researcher included the following question in the semi-structured interview guide: "How do you see your personal experiences with mental health, as a former athlete or in general, influencing the way you support your student-athletes' mental health?" The researcher did not identify any patterns within participant responses that indicated that a coaches' experience in sport has made it challenging for them to support student-athlete mental health. Instead, it appeared that almost every coach reflected on how differently they approach mental health and help-seeking among their teams compared to how such topics were approached in their own sport experiences. Further, it has been suggested that younger coaches may be more likely to engage in behaviors supportive of student-athlete mental health (Kroshus, Wagner, et al., 2019). However, several coaches acknowledged that experience has positively influenced their ability to provide student-athletes with support for their mental health and one coach expressed the belief that it would be impossible for a new coach to know how to approach different situations related to student-athlete mental health.

Limitations

Data collection for the current study took place during a time in which the effects of the COVID-19 pandemic were still being experienced by individuals, universities, and university athletics in a variety of ways. The many ways in which the pandemic may have affected participants may serve as a limitation to the current study. Several coaches did discuss the pandemic in some aspect throughout their interview. Several coaches highlighted perceiving that more students than ever needed professional mental health resources throughout the pandemic. However, due to changes in how services were delivered, it was very difficult for university

mental health resources to provide adequate and timely services to all students that needed it. This was a topic that the researcher was able to discuss with participants that engaged in the process of member reflections. Several coaches indicated the perception that the pandemic exacerbated an already existing problem of not having enough resources on campus. However, the recent experience of this barrier may have impacted the way in which coaches view the barrier of insufficient resources.

The effects of the pandemic may also have made coaches more aware of topics related to mental health and help-seeking, meaning that recent experiences may have influenced the likelihood that some individuals would agree to participate in the study. Additionally, the many changes that occurred to university athletics scheduling may have impacted the coaches that agreed to participate in the study. Several universities did not participate in athletics during the year that data was collected. Additionally, some teams competed during seasons that are not traditional for their sport. Ultimately, the many ways in which the pandemic impacted university athletics may have affected recruitment.

Additional possible limitations include volunteer bias and social desirability. Coaches that were willing to participate in this study may have done so because they are more cognizant of or interested in topics related to student-athlete mental health. As a result, there is potential that data lacks the experiences of coaches who are not interested in or comfortable discussing their experiences associated with student-athlete mental health. Social desirability tendencies commonly emerge when participants are involved in research regarding topics they feel are sensitive (Grimm, 2010), which may be the case with a study focusing largely on mental health.

Finally, a lack of experiences associated with supporting student-athlete mental health may have served as a limitation in the study. Coaches with fewer years of coaching experience

may have had a more difficult time responding to questions about how they support student-athlete mental health simply due to having less experience doing so.

Practical Implications

The current study provides several implications for future educational resources for coaches. This is the first study to date to qualitatively explore collegiate coaches' experiences in supporting student-athlete mental health and to identify what behaviors coaches are actively engaging in to support student-athlete mental health. The existing NCAA online module for coaches, "Supporting Student-Athlete Mental Wellness," aims to increase mental health literacy and reduce stigmatizing beliefs toward mental health and help-seeking in order to increase the likelihood that coaches will engage in supportive behaviors (Kroshus, Wagner, et al., 2019). In developing future educational resources for coaches, it may be important to consider addressing barriers beyond mental health literacy and stigmatizing beliefs. Primarily, a focus may be increasing self-efficacy.

Several coaches in the current study discussed desiring education that would create a more seamless process of addressing mental health concerns among student-athletes. It is likely that institutions will need to have some level of involvement in order to create such a process. Because the mental health resources available at each university differ, as discussed by participants in the current study, it will be difficult for a general educational resource to enforce engagement in specific protocol. Universities likely need to play an active role in defining coaches' roles in supporting student-athlete mental health and providing clear protocols to follow in a variety of situations dependent upon the resources available.

Future educational resources could also place further emphasis on behaviors that coaches appear to not be engaging in as often as others. Specific emphasis is likely needed on the tertiary

level of prevention in order to promote coach engagement in supportive behaviors after a referral is made. Further information could also be provided to coaches regarding how to speak to their athletes about the topic of mental health and help-seeking, in order to promote consistent messaging to student-athletes.

Future Directions

Due to the low response rate, future research should aim to recruit coaches that may not be as interested in or comfortable discussing mental health as the participants in the current study. It is possible that coaches' that do not perceive a role in supporting student-athlete mental health chose not to participate in the study. Accessing coaches with such perceptions will be important in informing future educational resources for coaches. It is likely that accessing coaches with these perceptions will be difficult. Researchers examining coach support of student-athletes have suggested that reaching such coaches may be done through needs assessment or education evaluation (Maurice et al., 2020). For example, researchers that evaluated the NCAA's "Supporting Student-Athlete Mental Wellness" module for coaches found that approximately 1/5 of coaches did perceive the education as useful and that nearly one quarter of participants did not agree that they would recommend the education to other coaches. However, the evaluation did not seek to gain insight as to why coaches responded in this way. Future research examining education could seek to provide coaches that indicated negative perceptions of the training the opportunity to elaborate on their experiences or participate in a qualitative interview in which their experiences are explored. It is also possible that due to when data collection took place, coaches of certain sports were busier than others and therefor, less likely to participate. Future research could then aim to collect data throughout a longer period of time, as opposed to the one semester in the case of the current study.

Additional research could also aim to explore the experiences of coaches among a wider variety sports, as there are many sports which participants in the current study did not coach. Future research should also seek to include coaches from Division II and Division III schools, as there may be differences among coaches' experiences supporting student-athlete mental health at each division, specifically related to barriers. To the degree that providing educational resources to coaches across each division is a goal, such research should be made a priority in order to ensure the needs of coaches at each level are adequately addressed.

Furthermore, the current study found that many coaches experienced a lack of self-efficacy as a barrier to supporting mental health. Further research could seek to explore what coaches feel they need in order to effectively engage in behaviors supportive of athlete mental health, and how such needs can feasibly be addressed. The only educational resource for collegiate coaches exists in an online format, which researchers acknowledge may not be sufficient to address all needs of coaches (Kroshus, Wagner, et al., 2019). The field could benefit from research that seeks to identify the degree to which coach needs can be addressed in different formats, seeking to give coaches a voice in the matter.

Conclusion

The current study explored the experiences of NCAA Division I coaches in supporting student-athlete mental health. The researcher aimed to add collegiate coaches' perceptions and experiences to the extant literature regarding coach support of student-athlete mental health, in an effort to aid in informing educational resources for coaches. The coaches that participated in the study discussed supporting student-athlete mental health in a variety of ways that are consistent with recommendations for coaches. However, results also suggest that there are areas of support that coaches are engaging in more than others. Coaches appear to face a variety of

barriers in supporting student-athlete mental health, all of which may influence their lack of engagement in specific supportive behaviors. Many coaches felt that they did not have the tools or level of confidence needed in order to engage in supportive behaviors, highlighting the need for further resources for coaches. Some coaches also perceived holding multiple roles in supporting student-athlete mental health, suggesting that coaches may lack clarity regarding what their role is. It is vital that coaches understand their role in supporting student-athlete mental health and that they feel confident and capable of support engaging in that role. The findings of the current study can aid in informing future research needed in order to create such resources.

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APPENDIX A

INTERVIEW GUIDE

Demographics

1. What gender do you identify with?

2. What is your age?

3. How do you identify racially?

4. How long have you been coaching at the Division I level?

Semi-Structured Interview Questions

1. Do you talk about the topic of mental health with your athletes and if so, how?

2. Describe how you typically respond if you suspect an athlete may be struggling with their mental health.

    A. What do you perceive your role to be in this situation?

3. What do your interactions look like with athletes that you know are experiencing mental health concerns?

    A. What do you perceive your role to be in this situation?

4. What do your interactions look like with athletes that you know have a history of experiencing mental health concerns?

    A. What do you perceive your role to be in this situation?

5. What obstacles or barriers have you experienced to supporting the mental health of your athletes?

6. How do you see your personal experiences with mental health, as an athlete and in general, influencing how you support student-athlete mental health?

APPENDIX B

DELIMITATIONS AND ASSUMPTIONS

Delimitations

The study was delimited to head collegiate coaches within the National Collegiate Athletic Association at the Division I level whom have coached for at least one year. Thus, results may not be generalizable to coaches within other divisions of collegiate sport.

Assumptions

The present study assumed that coaches would provide honest answers during their interview. The study also assumed that coaches would be able to reflect on their experiences with student-athlete mental health.

APPENDIX C

DEFINITION OF TERMS

Help-seeking attitudes: "people's overall evaluation (i.e., good vs. bad) of the act of seeking help from a mental health professional" (Hammer et al., 2018, p. 3)

Mental health: "a dynamic state of internal equilibrium which enables individuals to use their abilities in harmony with universal values of society. Basic cognitive and social skills; ability to recognize, express and modulate one's own emotions, as well as empathize with others; flexibility and ability to cope with adverse life events and function in social roles; and harmonious relationship between body and mind represent important components of mental health which contribute, to varying degrees, to the state of internal equilibrium" (Galderisi et al., 2015, p. 231-231)

Mental illness: "a syndrome characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning. Mental disorders are usually associated with significant distress or disability in social, occupational or other important activities" (APA, 2013, p. 20)

Public stigma: "an external form of stigma referring to the belief that society deems an individual possessing certain traits or behaviors as socially unacceptable or undesirable" (Hilliard et al., 2018, p. 2)

Self stigma: "is internal and refers to the individual's belief that he or she is viewed as unacceptable by society/others" (Hilliard et al., 2018, p. 2)

APPENDIX D

LITERATURE REVIEW

The American College Health Association (ACHA) reported in their 2018-2019 assessment that in the past year 45% of college students had felt so depressed it was difficult to function and 65.7% had felt overwhelming anxiety. Only 20% of students however reported receiving any professional help for depression and 24.3% reported receiving professional help for anxiety (ACHA, 2019). The University of Michigan's 2018-2019 Healthy Minds Study data examining over 60,000 students from 79 different institutions also showed the disproportionate rates of those experiencing mental health issues and those receiving professional help, reporting that 36% of students screened positive for moderate and major depression, 31% screened positive for elevated general anxiety, 34% screened positive for elevated eating concerns, and just 30% of total students reported receiving any mental health counseling in the last year (Eisenberg & Lipson, 2018). The Substance Abuse and Mental Health Services Administration reported data suggesting that the percent of college-aged individuals experiencing mental illness who actually receive mental health services may be as low as 15% (U.S. Department of Health and Human Services, 2019).

Student-athletes represent a subgroup of the aforementioned college students that are not exempt to experiencing challenges to their mental health. In fact, the National Collegiate Athletic Association (NCAA) Chief Medical Officer stated in 2013 that student-athletes identified mental health and wellness as the number one health concern for student-athletes (NCAA, 2014). While student-athletes are exposed to the same stressors as the general college-student population including greater independence, new living environments, change in social activities and peer groups, finding a career path, and increased academic demands (Acharya et al., 2018; Mayhew et

al., 2016) it is widely recognized that they are also subject to additional stressors and demands unique to their roles as student-athletes that may increase their likelihood of experiencing mental ill-health (Davorin & Hwang, 2014; Egan, 2019; Etzel, 2006). Indeed, collegiate student-athletes report a variety of role-related stressors such as strict scheduling, missed classes and decreased time for academics due to travel, overbearing surveillance and control, performance pressures, and sport injuries (Cosh & Tully, 2015; Etzel, 2006; Hatteburg, 2020, 2018; Patukian, 2015). Further, in a survey of 56 college student athletes regarding their role-related stressors, 100% reported experiencing some form of institutional stress such as strict scheduling and surveillance and 96.46% reported experiencing performance pressures. In addition, 89.29% of athletes surveyed reported experiencing role overload (Hatteburg, 2020).

While a general consensus has yet to be reached regarding how the rate at which mental health concerns are experienced among student-athletes compares to that of the general student-population, the National Collegiate Athletic Association (NCAA, 2016) reported that approximately 30% of student-athletes had felt "intractably overwhelmed during the past month" and data from a pilot study addressing knowledge and attitudes about mental health found over 60% of athletes felt mental health issues impacted their athletic performance (Kern et al., 2017) A three-year longitudinal study published the same year reported that almost one quarter of athletes experience depressive symptoms at the clinical level (Wolanin et al., 2016) while other studies suggest this number may be higher than one-third, similar to the rates of the general student population reported by the 2018-2019 Healthy Minds Study (Cox et al., 2017; Drew & Matthews, 2019). Depression and anxiety are not the only prevalent mental health concerns among student-athletes. Studies have also suggested that involvement in certain sports may also increase the risk of athletes engaging in harmful behaviors like disordered eating (Petrie &

Greenleaf, 2007; Wells et al., 2015) with estimates of disordered eating observed at rates as high as 19% in male athletes and 45% in female athletes (Bratland-Sanda & Sundgot-Borgen, 2013). Student-athletes have also been identified as more likely to engage in binge-drinking and suffer alcohol-related consequences (Martens et al., 2006; Parisi et al., 2019). Furthermore, some athletes may be more susceptible than others to such experiences.

Female athletes and freshman athletes may be at an increased risk of experiencing depression compared to male athletes and non-freshman athletes (Yang et al., 2007), with one study suggesting female athletes may be 1.8 times more likely to experience depression than male athletes (Wolanin et al., 2016). ACHA data from 2008-2012 displayed discrepancies between male and female athlete mental health experiences as well with 21% of males and 28% of females reporting feeling depressed and 31% of males and 48% of females reporting feeling anxiety (Davoren & Hwang, 2014).

Since 2014, the NCAA has increased their efforts at addressing these emerging mental health concerns which resulted in the formation of the NCAA Mental Task Force. The same year, the first comprehensive overview of mental health in collegiate sport titled "*Mind, Body, and Sport: Understanding and Supporting Student-Athlete Mental Wellness*" was published (NCAA, 2014). In 2016, the publication was followed by a document that provided the very first round of extensive recommendations to all athletic departments on how to support student-athlete mental wellness titled the "*Inter-Association Consensus Document: Best Practices for Understanding and Supporting Student-Athlete Mental Wellness*" (NCAA, 2016). Further, since 2014 the NCAA has continued to provide funding each year to programs seeking to find ways to further support and promote student-athlete mental health. One example includes the University of Michigan's Athletes Connected program which addresses mental health awareness, help-

seeking stigma, and coping skills (Kern et al., 2017), the first ever online program to address eating disorders and body image for male and female student-athletes (Robinson, 2015). Other programs exist that seek to provide student-athletes with tools to maintain and enhance their mental well-being, decrease the stigma associated with mental ill-health, and increase mental health literacy (e.g. Bullard, 2017; Chow et al., 2018; Scholefield & Firsick, 2018).

Student-Athlete Help-Seeking

Despite the apparent increase in mental health initiatives, it appears that similar to the general student population, athletes may be underutilizing psychological services due to a variety of barriers. Physical and systematic barriers including lack of time, accessibility, and availability of services are commonly cited by athletes (Gulliver et al., 2012; López & Levy, 2013; Moore, 2016). Nearly half of athletes report never receiving any mental health education from their respective athletic department and over a quarter report not knowing how or where to access services (Cox et al., 2017). A lack of education and accessibility is not a problem unique to one level of collegiate sport. Moore (2016) found over 300 athletes across DI, I, and III institutions reported that psychosocial services were less available than academic and athletic services. In addition, athletes across each level reported psychosocial services as less available than their athletic directors. Authors point out that while the NCAA has provided recommendations on how to support student-athlete mental health, each individual institution has the right to decide how to implement such recommendations, resulting in potentially different support being provided and messages being sent regarding mental health at every single institution (Moore, 2016).

In addition to physical barriers, athletes' own attitudes toward help-seeking often represent significant barriers. Help-seeking itself can be defined as "an adaptive coping process that is the attempt to obtain external assistance to deal with a mental health concern" (Rickwood

& Thomas, 2012), while help-seeking attitudes have been described as the "overall evaluation of the act of seeking help from a mental health professional" (Hammer et al., 2018). When help-seeking attitudes were examined in a college-student population, they were found to be the strongest predictor of intentions to engage in help-seeking (Li et al., 2014). Results from a study that surveyed 349 NCAA athletes across 19 Division I programs, 17 Division II programs, and 24 Division III programs may help describe some of the help-seeking attitudes held specifically by student-athletes. When the student-athletes were asked to rate their level of comfort seeking various academic, athletic, and behavioral services, students-athletes rated all behavioral health services last (Moore, 2017). Results suggested that 25% of athletes in the same study reported having little to no comfort seeking mental health services.

Stigma

Stigma is not only of the most commonly cited barriers to help-seeking by athletes (Biggin et al., 2017; Gulliver et al., 2012; Moore 2017), it has also been found to be negatively associated with help-seeking attitudes (Hilliard et al., 2019). Stigma associated with mental illness can be broken down into two components including public stigma, which is comprised of the negative or prejudice attitudes the general public holds and displays toward individuals with mental illness, and personal/self-stigma, which occurs when individuals internalize those negative and prejudice attitudes, resulting in decreased self-esteem and self-efficacy (Corrigan et al., 2006). Lopez and Levy (2013) surveyed 165 NCAA athletes regarding their barriers to seeking psychological help, finding that three of the four significantly identified barriers were associated with stigma (fear of stigma for seeking services, fear teammates will find out they are in treatment, fear they will be considered weak).

Both perceived and self-stigma have been identified at greater levels among student-athletes than non-athletes, and have been found to be strong predictors in the variance of student-athlete help-seeking attitudes (Kaier et al., 2015; Wahto et al., 2016). In addition, a positive correlation has been identified between perceived and personal stigma among student-athletes (Hilliard et al., 2019; Kaier et al., 2015). These findings suggest that the mental-health stigma student-athletes are exposed to may increase the personal-stigma they hold toward mental health, potentially impacting their help-seeking attitudes.

Two major sources of perceived stigma to athletes that have been clearly identified in research are teammates and coaches, with athletes citing feelings of disappointment from teammates and coaching staff and worry that teammates and coaches will view help-seeking as a sign of weakness as barriers to help-seeking (Gulliver et al., 2012; Lopez & Levy, 2013; Moore, 2019). Athletes' linking of mental illness and help-seeking to perceptions of weakness and threats to status among their teammates and coaches is not a novel finding (DeLenardo & Terrion, 2014). Direct quotes from athletes when asked about their barriers to help-seeking further lend to the idea that perceived stigma among their teams is a barrier to seeking help with one athlete stating, "My coach tells players who discuss their feelings to suck it up and play. He tells us feeling anxious is normal and only makes us stronger athletes. I do not show any emotions around him so he will not think that I am weak," (Moore, 2019, p. 137).

Furthermore, Hatteburg (2020) investigated 56 Division I student-athletes' perceptions of institutional sources of support for different role-related stressors and how their perceptions may influence their help-seeking decisions via semi-structured interviews. Hatteburg analyzed the sources of support most commonly utilized as well as the sources of support that were most commonly avoided, finding that many athletes discussed their help-seeking as a process

dependent on what it is they are seeking help for. For example, while coaches were discussed as

being utilized for some type of support by 80.3% of athletes, primarily performance-related

concerns, they were also the most frequently cited source of support that was purposely avoided.

When the researchers analyzed reports of why sources of support were avoided two major

themes emerged, the first being the feeling that sources of support can only provide a limited

scope of support and the second being that sources have conflicting interests as university

employees that compromise the degree of social support they can provide. These findings further

suggest that some athletes may believe individuals within their team's environment negatively

perceive mental health help-seeking and do not play an active role in providing psychosocial

support. The authors also suggest that as a result of attempting to match resources to their needs

based on the expertise of resources, athletes were ultimately left feeling that no resource at all

was there to care for their well-being.

Coaches and Team Culture

The idea that coaches have the ability to play an important role in supporting athlete

mental health and well-being has been endorsed by athletes (Biggin et al., 2017; Gulliver et al.,

2012), parents (Brown et al., 2017), sport organizations (Henriksen et al., 2019; NCAA, 2017),

and coaches alike (Biggin et al., 2017; Mazzer & Rickwood, 2015). Researchers who have

examined coaches' role in supporting student-athlete mental health have asserted that due to the

unique position of coaches in relation to their athletes, coaches have the ability to promote

positive attitudes toward mental health help-seeking, as well as to detect changes in athletes that

may suggest potential health concerns, therefore aiding in the process of early identification and

intervention (Bapat et al., 2009; Gulliver at al., 2012; Kroshus et al., 2014; Sebbens et al.,

2016). More recently, authors of narrative and systematic reviews examining the role of coaches

in supporting student-athlete mental health point to the influence coaches have on the environment of their athletes, and more specifically, their team culture (Bissett et al., 2020; Castaldelli-Maia et al., 2019; Rice et al., 2016).

When discussing coaches as creators and influencers of team culture in reviews, authors recognize that there is little research regarding coaches and culture (Bissett et al., 2020; Schroeder, 2010). The research on group culture that does exist has instead focused largely on organizational culture, most commonly different business or corporate contexts, and how the leaders of those organizations influence their respective cultures. Edgar Schein (2010) has heavily researched organizational culture and leadership, and his theoretical framework has frequently been used (Bissette et al., 2020; Cole & Martin, 2018) to understand the role of coaches in relation to team culture. Schein (2010) asserts that, "Culture is ultimately created, embedded, evolved, and ultimately manipulated by leaders" (pp. 3). Researchers in the field of sport and exercise psychology highlight that as coaches function as leaders of their teams, they are no exception to this assertion (Bissett et al., 2020, Schroder 2010). In addition, Schein (2010) discusses various levels of culture in addition to organizational, including subculture and microculture, to which he even directly provides the example of football teams acting as a type of microculture in which behaviors and attitudes are coach driven.

In order to understand how coaches influence culture, and how culture can influence student-athletes in relation to mental health and help-seeking behaviors, the three levels that make up culture put forth by Schein (2010) will be described as well as how these levels may be observed within a sport context.

The first and most visible level of culture is known as artifacts, which includes observed behaviors and any parts of the physical environment (Schein, 2010). Within a team, artifacts may

present themselves as the language used by athletes and coaches, team rituals, or even with what is posted on the walls in a locker room. Understanding what messages are sent about culture by artifacts can be challenging and dependent on the individual interpreting the messages. For this reason, Schein (2010) points to the next two levels of culture as providing much clearer messages about the values and norms among a group that guide behavior on a regular basis.

The second level of culture consists of espoused beliefs and values, which are typically set forth by a group leader upon initial formation or when a novel problem emerges and must be addressed. An espoused belief in a sports context might form when an athlete expresses to their coach that they are struggling with their mental health. If the coach refers the athlete to a helping professional, the athletes will presume that a coach believes seeking help when needed is an acceptable and beneficial act. Furthermore, if the athlete is to seek help and the team perceives that the athlete experienced positive outcomes, the espoused belief that seeking help is good becomes shared among the team. The idea that athletes adopt beliefs and values communicated by coaches are in alignment with findings that athlete's believe coaches have the ability to normalize mental-health help-seeking (Gulliver et al., 2012), which researchers assert has positive implications for athlete help-seeking attitudes (Bissett et al., 2020).

When espoused beliefs and values become unconsciously held and endorsed, they may transform into the third level of culture known as basic assumptions. Basic assumptions are the level of culture that provide a sense of how to interpret and react to situations and most strongly determine behavior, thoughts, and feelings overall (Schein, 2010). Schein (2010) asserts that because challenges to these assumptions create feelings of confusion, unknowing, and discomfort, behaving in any way contradictory to the basic assumptions of a group appear incomprehensible to group members. For example, if the coach in the aforementioned example

instead told the struggling athlete to "suck it up", the athletes might believe their coach thinks negatively of help-seeking. If all athletes moving forward seek to cope with their own mental health struggles on their own and appear to have success, the basic assumption held by a team could be that seeking help is not necessary. In this case, anyone that engages in such behaviors would be deviating from the team's norms and beliefs and would likely be discouraged from doing so.

Coaches, Culture, and Mental Health/Help-Seeking

Schein (2010) explains leaders serve as the source for the original set of values, beliefs, and assumptions that influence group behavior. Leaders of groups embed these values, beliefs and assumptions through various mechanisms. While there is a lack of empirical literature examining coaches, team culture, and mental health, researchers who have more broadly examined associations between coaches and team culture have found that coaches engage in similar processes of embedding values, beliefs, and assumptions that influence athletes' thoughts and behaviors.

One way that leaders embed the values and beliefs they find important is through displaying what they pay attention to, recognize, or even simply comment on (Schein, 2010). Various studies have shown that coaches can impact athletes' feelings and behaviors through messages about what is acceptable and normal. For example, when researchers interviewed 28 female athletes regarding how coaches communicate about body image and various health behaviors, athletes indicated that the way in which coaches communicated messages about body image and what those messages were affected their own perceptions of their athletic ability, as well as their diet and exercise behaviors (Beckner & Record, 2016). For example, athletes whose coaches sent messages about losing weight, but neglected to discuss how to do so in a healthy

manner, perceived their coaches as prioritizing weight-loss over engaging in healthy behaviors.

Furthermore, some athletes perceived coach emphasis on weight loss as so important that the

athletes felt like coaches used weight to determine positions within the team (Beckner & Record,

2016). Similarly, clear coach communication with athletes endorsing the need to report

concussions was able to significantly predict athlete intentions to report symptoms of concussion

to athletic personal (Milroy et al., 2019). Schroeder (2010) interviewed ten NCAA coaches who

had successfully coached losing teams to championships within five years and asserted that these

performance changes occurred alongside changes in team culture. Schroeder (2010) found that

communication of team values from coaches was a key to establishing successful team cultures.

Schroeder (2010) also found that coaches reported engaging in an additional way that

leaders commonly embed beliefs and values, known as role-modeling (Schein, 2010). Schroeder

(2010) found that coaches can help accelerate the process of changing team culture by modeling

the very behaviors they want their athletes to value and engage in. Furthermore, Schroder (2010)

asserts that by modeling behaviors that conflict with the messages being sent, coaches may be

undermining efforts to positively affect team culture. The impact of coach behaviors on athletes'

perceptions of what is acceptable and normal have also been discussed in the context of body

image and exercise behaviors. Athletes reported seeing coaches as both positive and negative

role models of eating and exercise behaviors that send messages about their opinions of body

image and exercise (Ward & Freysinger, 2014). Coaches themselves have also emphasized the

importance of serving as role-models for their athletes in regard to body image (Sabiston et al.,

2020). Role modeling in sport has also been observed in regard to emotions, with coaches

reporting seeing athletes mirror the negative emotions they display in stressful situations

(Thelwell et al., 2017).

Finally, research suggests that coaches can also influence athlete behavior through a third mechanism Schein (2010) highlights, reinforcement and consequences. Athletes have previously cited fearing consequences of help-seeking as barriers to seeking-help, even directly citing the fear that seeking psychological services will impact their performance or ability to play or train (Gulliver et al., 2012; Moore, 2017). As previously discussed, athletes also frequently report the fear that coaches will perceive them negatively for help-seeking as a barrier to seeking help. Studies have suggested that athletes experience elevated stress and even loss of identity in situations when they feel they have not met the expectation of their coaches (Pensgaard & Roberts, 2002) which has important implications for how coaches that appear to respond poorly to athlete's seeking help can impact athletes. Bissett et al. (2020) asserts that coaches can directly shape the mental health culture on their teams by shaping the consequences that athletes can expect from help-seeking. The idea that coach expectations can impact athlete behavior have been noted in other sports contexts. One study examining athlete's expectations of whether a coach would believe they did the right thing in reporting concussions symptoms or not found that perceptions of coach support significantly predicted athlete reporting behaviors (Baugh et al., 2014).

Role of the Coach

Recently, authors have utilized mental health prevention framework, research recommendations, and expert opinion to conceptualize what exactly the role of coaches is in supporting athlete mental health and how they can engage in this role (Bissett et al., 2020). The role of coaches regarding athlete mental health has been conceptualized using the World Health Organization's (WHO) prevention framework (Bissett et al., 2020), which consists of primary, secondary, and tertiary prevention measures (WHO, 2002). Primary interventions include those

that aim to reduce mental illness occurrence among a population by making changes to the population's environment and providing individuals with coping skills. Within the sport setting, this level has been conceptualized simply as "Culture Setting." Some coach behaviors supportive of this level of prevention include communicating the value of help-seeking, utilizing stakeholder support, and reinforcing behaviors consistent with a culture that supports help-seeking. Secondary prevention, conceptualized in sport as "Identification and Referral," includes interventions that seek to shorten the duration of which mental health concerns are experienced via early identification and treatment. Coach behaviors congruent with this level of prevention include but are not limited to remaining aware of changes in athlete behavior and providing information regarding available support. Tertiary prevention, deemed "Treatment Adherence," involves efforts to minimize the negative consequences of those experiencing and/or receiving treatment for mental health concerns. Coach behaviors congruent with this level of prevention include expressing willingness to modify demands related to sport and respecting an athletes' desired level of coach involvement in the treatment process (Bissett et al., 2020). The behaviors outlined in this framework are consistent with the behaviors promoted in the *Inter-Association Consensus Document: Best Practices for Understanding and Supporting Student-athlete Mental Wellness* (NCAA, 2013). The behaviors are also consistent with what the latest educational intervention for NCAA coaches, the NCAA "*Supporting Student-Athlete Mental Wellness Module*", sought to promote engagement in including culture setting communication, making referrals, and providing social support (Kroshus, Wagner, et al., 2019).

While the ability of coaches to play a key role in shaping a culture that is supportive of student-athlete mental health and help-seeking has been established and recommendations have been made on how to do so, what exactly that role is lacks clarity. It appears that student-athletes

and coaches may view the role of the coaches in supporting student-athlete mental health and well-being very differently. A qualitative study asked athletes and coaches to identify individuals they felt were most appropriate to support athletes experiencing mental ill-health. While athletes rated coaches as one of the top three most appropriate professionals, coaches did not. Instead of identifying themselves as individuals who should provide direct support, coaches suggested that they are to act as gatekeepers to other sources of support. Coaches and athletes who participated in this study were also asked to identify the most appropriate ways in which coaches support or could support athletes experiencing mental ill-health. While athletes included communicating openly as well as providing referrals to appropriate support among the top three most appropriate ways to provide support, coaches did not include either among their top three most appropriate ways, further suggesting role-confusion may exist among athletes and coaches in regard to who should be providing support and how (Biggin et al., 2017). Unfortunately, the empirical literature lacks qualitative data regarding the perceived role of NCAA coaches in supporting student-athlete mental well-being. The aforementioned study examined coaches from the United Kingdom which may prevent generalizing findings to coaches from the United States.

Additional international research has identified the perception of coaches that their role is to serve as "gatekeepers" to other sources of mental health, as opposed to serving as key leaders who can influence the attitudes and behaviors of their athletes. Mazzer and Rickwood (2015) interviewed thirteen coaches of athletes aged 12-18 in Australia regarding their perceived role-breath and ability to support their athlete's mental health. While all coaches acknowledged the potential role they have in impacting the mental health of their athletes positively as well as supporting athlete mental health, the majority of coaches discussed clear limits to this role. One coach alluded to the role of serving as gatekeepers in stating, "There's only a limited window

when we're involved. We're like basically the first point of contact and then it's out of our hands," (p. 109). Differences between coaches emerged as well in regard to the perceived expectations of coaches in supporting athlete mental-health. While some coaches explained feeling that there are not high expectations to support athlete mental-health until their mental health is impeding with performance, other coaches explained feeling that the expectations placed on coaches in regard to athlete mental health have changed in recent years. One coach shared, "It's a changing role. From the days where I started, you didn't have to worry about that stuff. You just coached, and went home," (p. 109).

The empirical literature lacks further qualitative research directly examining coaches' perceived roles in supporting student-athlete mental health and well-being. However, data from studies examining the actions coaches take to support student-athlete mental health and well-being can provide valuable information regarding what role coaches are currently assuming. A study examining 190 high-school coaches in the U.S. through written surveys found that despite 63.2% of coaches reporting being concerned about depression, nearly 20% of coaches who coached an athlete with depression did not offer help of any kind. Similarly 15% of total coaches reported they did not feel providing support to student-athletes with mental health concerns was within the scope of their role. Perhaps more markedly was that this study found coach age to be significantly associated with action taken to support athletes. Results showed that older coaches were less likely to extend help to athletes struggling with their mental health. Authors provide suggestions for why this may be including younger coaches possibly developing greater levels of rapport or trust with their athletes, increasing the likelihood that athletes will disclose concerns, as well as the possibility that younger coaches are more willing to address mental health concerns (Kroshus, Chrisman, et al. 2019).

In Mazzer and colleagues' (2015) examination of coaches of elite youth athletes in Australia, 85% (eleven of thirteen coaches) recognized that supporting athlete mental health was a part of their role. The majority also noted their role in identification of mental health concerns and referral practices, but coaches rarely discussed the act of raising mental-health awareness or reducing stigma as associated with their role in supporting athlete mental-health. Due to the impact coaches may have on the help-seeking attitudes and behaviors of their athletes as leaders of their teams (Bissett et al., 2020; Schroeder, 2010), there is potentially a void in this type of support that could be crucial for athletes.

Barriers to Providing Support

Education interventions in recent years have sought to address various barriers facing coaches to both creating an environment supportive of mental health and help-seeking as well as providing direct mental-health support. To date, four individual mental health education programs for coaches have been implemented and researched (Pierce et al., 2010; Sebbens et al., 2016; Loughran & Skvarla, 2018; Kroshus, Wagner, et al., 2019). Of these studies, two were implemented among coaches currently employed under institutions within the NCAA. The remaining two were implemented among coaches of elite athletes in Australia. Of these educational programs, three main goals of the programs were present: improvements in mental health literacy, improvements of levels of self-efficacy, and decreases in mental health stigma or negative attitudes toward help-seeking. Of the evaluations of each of the four programs, three sought to examine effects on mental health literacy, three sought to examine effects on levels of self-efficacy, and three sought to examine effects on levels of stigma or help-seeking attitudes. The individual educational initiatives will be briefly summarized in order to then address individual barriers and the impact of the initiatives on them.

Educational Initiatives

Coach the Coach Project

The first research on an educational initiative for coaches was published in 2010, which evaluated the 2007-2008 Coach the Coach project (Pierce et al., 2010). The Coach the Coach project was implemented among Australian football clubs and aimed to provide club coaches with enhanced levels of mental health literacy and confidence in order to promote an environment in which the likelihood of early and effective responses to athletes with mental health concerns was increased. Over the span of three weeks, 36 coaches participated in twelve hours of training through a national initiative known as Mental Health First Aid. All coaches were from teams competing in rural areas and 35 of the 36 coaches were male.

Participants completed a pre-test immediately prior to training and a post-test six months following training completion. Coaches were asked to respond to clinical scenarios pre- and post-test to provide a measure of their ability to recognize depression and schizophrenia. Pre- and post-testing also measured knowledge of available treatment for mental health challenges, as well as attitudes toward and confidence in responding to mental health concerns. Researchers also conducted focus group interviews to further investigate coach experiences with the training, the impact of the training within their club, and experiences in responding to mental health concerns.

Mental Health in Sport Program

In 2016, researchers published the examination of an educational program titled Mental Health in Sport (MHS) implemented among 166 coaches, trainers, and supportive staff such as nutritionists and physical therapists (Sebbens et al., 2016). MHS was developed with the hope of providing a mental health literacy intervention that was specific to elite sport. The number one

goal of MHS was to increase early intervention for those who may be struggling with their

mental health by providing the knowledge and confidence to help individuals who may be

struggling. Specifically, participants were taught an action plan that consisted of recognizing,

reaching out, referring, and remaining supportive. Eight workshops consisting of lectures,

videos, discussions, and role-play scenarios of 16-31 participants each were conducted. In order

to allow for comparisons, participants of the first four workshops made up the experimental

group, and participants of the last four workshops made up the waitlist group. Participants

completed questionnaires prior to the workshop, 2-4 weeks following the experimental group

workshops, and 2-4 weeks following the waitlist group workshops. Questionnaires were

completed online and consisted of measures of depression and anxiety literacy and confidence in

providing help to someone experiencing mental health challenges.

Online Education Pilot Study

In 2018, a pilot study funded by the NCAA Innovations in Research and Practice Grant

evaluated the implementation of a web-based program among 30 head and assistant coaches at a

single DIII institution (Loughran & Skvarla, 2018). The program aimed to educate coaches on

warning signs and help-seeking, barriers to seeking help, coach-athlete relationships, application

of knowledge, referring student-athletes, and communicating with student-athletes. Coaches

completed pre-post test measures consisting of The Stigma Towards Depressed Students

Measure, as well as a questionnaire which assessed level of comfort related to building rapport

with athletes, recognizing barriers to seeking help, and recognizing student-athletes who may be

at-risk.

NCAA Supporting Student-Athlete Mental Wellness

In 2019, an evaluation of the most recent and most widely implemented educational initiative was published (Kroshus, Wagner, et al.). The NCAA's "Supporting Student-Athlete Mental Wellness" online module aimed to increase mental health literacy and reduce stigma. The program specifically aimed to increase mental health literacy within three domains: engagement in culture setting communication, providing emotional support to athletes, and referrals to sports medicine staff. Coaches completed pre-post intervention measures of mental health literacy, stigma about mental health help seeking and sport performance, intentions about culture setting communication, and intentions about providing direct support or making referrals. Multilevel linear models with within-person random effects were used to assess the effect of the intervention on each of the aforementioned variables. Coaches also completed a baseline measure of attitudes about one's own mental health help-seeking. 969 coaches completed pre-test measures and 347 completed post-test measures. Coaches represented twenty different sports across all three NCAA divisions. No football coaches participated in the study.

Coach Mental Health Literacy & Awareness

Examinations of three of the four educational programs for coaches implemented thus far sought to explore impacts of the educational intervention on mental health literacy. Mental health literacy consists of "knowledge and beliefs about mental disorders which aid their recognition, management, or prevention," (Jorm et al., 1997, p. 184). Studies suggest that increasing mental health literacy among coaches may increase their promotion of positive mental health and help-seeking attitudes, as well as allow for increased early identification of those experiencing mental health challenges, and therefor, early intervention (Bapat et al., 2009; Sebbens et al., 2016). Coaches have also overwhelmingly supported the idea that mental health education is needed (Biggin et al., 2017; Hegarty et al., 2018; Kroshus, Chrisman, et al., 2019), with over 60% of

nearly 3000 coaches reporting a desire for the NCAA to provide mental health education (Sherman et al., 2005).

Mazzer and Rickwood (2015) found that just half of the coaches that they interviewed had skills and knowledge related to mental health, and that some even directly reported having to rely solely on their levels of common sense when addressing mental health and mental health related issues. In 2019, Sullivan and colleagues surveyed eighty coaches and athletic trainers working at Canadian universities on their mental health literacy using the Mental Health Literacy Scale. The average score of mental health literacy was similar to the general public, however, significant differences were found when examining demographic variables. Females scored significantly higher on the Mental Health Literacy Scale when compared to males. Authors note that while this finding is consistent with other research findings that females are more literate about mental health concerns such as eating disorders and depression, the population of coaches and athletic trainers used in the study consisted of over 69% male participants, which may have skewed the data. In addition, significant negative correlations were identified between age and mental health literacy, as well as numbers of years experience in their current role and mental health literacy (Sullivan et al., 2019). As Kroshus, Wagner, et al. (2019) found that older coaches were less likely to extend support to athletes struggling with mental health concerns, this further suggests that mental health literacy may be associated with increased likelihood to recognize mental health concerns and provide associated support.

The educational interventions that have been studied thus far have indeed found success in increasing mental health literacy. Post-intervention, the Coach the Coach project found improvements in coach ability to recognize depression and schizophrenia (Pierce et al., 2010) and the Mental Health in Sport program found significant increases in depression and anxiety

literacy (Sebbens et al., 2016). However, while a key goal of mental health literacy is to increase the recognition and awareness of mental health concerns, studies suggest that coaches continue to lack mental health awareness. Hegarty and colleagues (2018) surveyed 253 cross country and track and field coaches at NCAA DI institutions regarding their knowledge and awareness of depression among their respective athletes. While the knowledge of coaches appeared to be high, with coaches scoring on average an 83% on the Adolescent Depression Knowledge Questionnaire, levels awareness appeared drastically different. Coaches estimated that just 11% of their current and former athletes have struggled with depression, while the actual prevalence of depression may be over triple what they estimated (Hegarty et al., 2018). Low levels of mental health awareness among coaches have been observed in various studies. In Biggin and colleagues' study examining athletes and coaches of elite sport teams in the United Kingdom, 73.7% of athletes reported experiencing mental ill-health, while just 37.5% of coaches reported ever witnessing it (2017). In a survey of 2894 coaches of female sports, 26% of coaches reported coaching at least one athlete who experienced disordered eating symptoms that they had not recognized while coaching them (Sherman et al., 2005). Because researchers assert that mental health literacy is about having knowledge that is linked to the possibility of action as opposed to just knowledge in general (Jorm, 2012), these findings have important implications for educational interventions moving forward.

Results from the examination of the NCAA module found that baseline mental health literacy was associated with intentions to engage in culture setting communication and providing emotional support. However, changes in mental health literacy post-intervention were not associated with increased intentions to engage in two of the three target behaviors, emotional support and referral to sports medicine staff (Kroshus, Wagner, et al., 2019). Research on coach

mental health education interventions lack the evidence of impact of the interventions on actual behaviors, however examining intentions to engage in behaviors provides important information regarding the impact of interventions. Overall, studies show mental health knowledge is not equal to mental health awareness, and that increases in mental health knowledge may not contribute to the likelihood coaches will engage in behaviors supportive of student athlete mental health.

Self-Efficacy

Three of the four studies aimed to increase self-efficacy among coaches in regard to behaviors supportive of mental health and help-seeking. Self-efficacy has emerged as a common barrier to providing support to athletes. In an examination of high-school coaches' mental health support, Kroshus, Chrisman, et al. (2019) found that self-efficacy was significantly correlated to coach action. Specifically, coaches who reported greater levels of confidence in their ability to support team members struggling with depression or anxiety were more likely to extend help to such athletes.

Mazzer and Rickwood (2015) found that while coaches reported a general sense of confidence in discussing mental health with their athletes, many coaches also expressed concern that they may say the "wrong" thing in attempting to have such conversations with athletes, which may exacerbate any issues that may be present. This fear has been examined in other contexts as well. In a qualitative study that examined coaches' perceptions of body image, coaches repeatedly highlighted feelings of apprehension toward having conversations regarding body image. Several coaches reported fearing their discussions would do more harm than good as well as endorsed the idea that athletes would not discuss body image even if the topic was brought up (Sabiston et al., 2020). The findings of this study are especially concerning as female

athletes have reported wanting coaches to initiate discussions in relation to body image (Coppola et al., 2014).

The Coach the Coach project found increases in confidence to assist someone experiencing mental health challenges among 16 of 24 coaches (Pierce et al., 2010). The MHS program significant increases in confidence which were sustained 6-8 weeks post-intervention (Sebbens et al., 2016). The online module pilot study results also showed increases in levels of comfort among coaches to recognize barriers to help-seeking, recognize at-risk athletes, and build rapport with athletes (Loughran & Skvarla, 2018). The findings of these studies also lack evidence of the impact of changes in self-efficacy on behaviors or intentions to engage in behaviors.

Stigma and Help-Seeking Attitudes

Three of the four evaluations examined the stigma or attitudes coaches hold toward help-seeking and mental health. Far more research has examined coach attitudes and stigma toward utilization of sport psychology services as opposed to specific mental health services, which is important to note as not all sport psychology consultants are trained and licensed to treat mental health concerns.

A 2010 study surveyed 815 NCAA Division I coaches regarding their willingness to encourage athletes to use sport psychology services (Wrisberg et al., 2010). 88.8% of total coaches rated their willingness to encourage athletes to use sport psychology services for performance related concerns as "favorable", while 77.5% rated their willingness to encourage athletes to use sport psychology services for personal concerns. Of coaches who reported having current access to sport psychology services, 96.8% reported willingness to encourage athletes to

utilize services for performance concerns, compared to 79.8% of those who reported willingness to utilize services to deal with personal issues.

Such reluctant feelings have been echoed in findings of qualitative studies in which coaches have expressed fear that sport psychology service use will result in athletes becoming less self-reliant and likely to use their reason for seeking services as an excuse (Zakrajsek et al., 2013) and even the feeling that athletes do not need any further support as they already have enough (Wrisberg et al., 2010). Further quantitative studies examining how collegiate coaches feel toward sport psychology services have found coaches own personal openness to services to be a predictor of intentions to utilize sport psychology services (Zakrajsek et al., 2011) as well as found stigma tolerance to be significantly associated with intentions to use (Zakrajsek & Zizzi, 2007).

Similar to the finding that coaches' own attitudes toward sport psychology services are associated with intentions to utilize services, findings from the educational interventions examined thus far suggest a similar link between coach attitudes and intentions of utilization of mental health services. The online intervention pilot study found no significant changes in stigma toward depressed students. The NCAA module asked coaches to complete a measure of sport stigma pre and post-intervention as well as a baseline measure of their own attitudes toward personal mental health help seeking. At post-intervention, sport stigma was decreased, although changes in sport stigma were not found to be associated with greater likelihood of engaging in two of the three desired behaviors, emotional support and referral intentions.

The baseline measure of coach attitudes toward their own mental health help seeking results in scores ranging from 5 to 20, with higher scores indicative or attitudes more supportive of help-seeking. Coaches scored on average 10.38 ± 2.65. While changes in sport stigma were

not associated with increased intentions of engaging in two out of three behaviors, baseline attitudes of coaches toward their own help-seeking of psychological services were identified as important determinants of intentions to engage in all three desired behaviors. Authors suggest that given help-seeking attitudes are influenced by contexts that promote self-reliance and stigmatization of mental illness (Clement et al., 2015), and that promotion of such messages have been increasingly observed in sport contexts (Gulliver et al., 2012; Jones, 2016; Wahto et al., 2016; Patukian, 2016), coaches who participated in sports as athletes may have been frequently exposed to ideas that negatively impacted their own help-seeking attitudes (Kroshus, Wagner, et al., 2019).

Coach Mental Health and Well-Being

Coaches have been identified as performers in their own right due to the variety of roles they must fill and challenges they face (Thelwell et al., 2008). Coaches report experiencing stress related to athlete, team, and personal performance, criticism, finances, relationship conflicts with staff, officials, parents, and administrators, lack of support, and sacrifice of personal time (Chroni et al., 2013; Olusoga et al., 2009; Thelwell et al., 2010). Coaches also identify a variety of negative responses and reactions to their stressors including anger, decreased motivation, feelings of depression, emotional fatigue, and changes in their personal coaching style and interactions with players (Frey, 2007; Olusoga et al., 2010; Thelwell et al., 2017). Olusoga and colleagues (2019) have also suggested that levels of stress may be highest among high performance coaches due to increased job insecurity and performance standards.

The assertion that further research is needed regarding coaches' responses to stress and how they manage stress has been widely made (Chroni et a., 2013; Frey, 2007; Olusoga et al., 2009; Olusoga et al., 2010; Olusoga et al., 2019; Thelwell et al., 2010; Thelwell et al., 2017).

Furthermore, research continues to lack research that goes beyond coaches' experiences of stress and examines their mental health and well-being as a whole. In a 2017 systematic review of stressors, coping, and well-being among coaches, only five studies were identified that examined the concept of well-being among coaches. Each of these studies used quantitative methods as well as self determination theory to explore antecedents of psychological well-being (Norris et al., 2017). At the end of the review, the authors asserted that well-being was the least well understood topic examined in the review.

Recently, questions have arisen regarding the way in which coaches care for their own mental well-being. A group of fifteen individuals deemed by authors of a 2019 narrative analysis as context experts including members of the NCAA Mental Health Task Force were asked to rate a list of coach behaviors in regard to supporting student athlete mental health and well-being on the degree of their usefulness, appropriateness, and feasibility. In response to the suggestion that coaches should share with athletes the ways in which they care for their own mental well-being, experts expressed feasibility concerns, suggesting that coaches may engage in ineffective self-care practices and that little is known regarding the mental health support coaches receive (Bissett et al., 2020). While research regarding this specific topic is lacking, findings from qualitative studies examining stress and burnout in coaches may lend to the discussion of coaches' experiences regarding support and coping strategies.

A narrative analysis of burnout was completed using interviews conducted with two coaches in Sweden, one of which coached the highest club level possible in Sweden and one who coached at the international level. Both coaches expressed feeling as if seeking either tangible or emotional support was a sign of weakness and made statements such as, "You don't ask for help," "You don't show any weakness," and "You should be able to handle everything." In

addition, a major theme identified was the overall desire to be perceived as "Superman" and to avoid displaying signs of vulnerability (Olusoga & Kentta, 2017).

Additional qualitative results provide information regarding the support use experiences of coaches. Olusoga, Butt, Hays, and Maynard (2009) interviewed six male and six female coaches with experience coaching at the international level. A lack of support system was directly identified as a stressor. One coach shared, "I mean it is a solitary role, there is nobody to go to, nobody to talk to," (p. 454) and another stated, "There's nothing to back up the coaches when the coaches need someone to talk to and say 'this is how I'm feeling, how can I cope with that, how can I deal with my athlete?' We're never given that option. I think sometimes, the coaches are forgotten," (p. 456). While the relationship between coaches' own attitudes toward help-seeking and support behaviors have been identified, and some insight regarding coaches' experiences with stress has been offered in the literature, the literature continues to lack the voices of coaches in understanding how coaches' own mental health experiences may impact the mental health support they provide.