

# Varsity Student-Athletes Perspectives on Accessing Social Support Resources at McMaster University

Rose Adusei<sup>1</sup>, Shanya Aguilar-Andrade<sup>1</sup>, Karmen Chazi<sup>1</sup>, Tiah Di Benedetto<sup>1</sup>, Elias Srouji<sup>1</sup>

## Abstract

The focus of this research is on the duality of the student-athlete lifestyle among varsity student-athletes at McMaster University regarding the social support services being offered on campus. Our study sought to examine the awareness, knowledge, and perceptions of the student-athlete population regarding social support resources that are offered to them on campus. We collected a sample size of 75 McMaster varsity student-athletes. Using an anonymous online survey, we collected opinions and perceptions from 75 self-identified varsity athletes at McMaster University. Our findings indicated that McMaster University varsity student-athletes do not hold a negative perception of accessing social support services on campus. However, the findings suggest a lack of awareness among the study population regarding the social support services available for student-athletes. Our research suggests there is a need for greater visibility of available services as well as promotion of help-seeking behaviours as student-athletes were found to be more willing to use services when recommended by athletic faculty members and staff. We hope that the collected data will help to provide feedback about the perceptions of social services on campus within the McMaster University athletic community.

## Introduction

The interest around studying a student-athlete's mental health is growing rapidly, which sparked our inclination to study this matter (Egan, 2019). Our understanding of a student-athlete is based on a student who participates in full-time studies and full-time athletic commitments. The duality of the student-athlete dynamic has instigated a healthy conversation regarding the social support services offered to these individuals. On one hand, student-athletes have a support network of teammates, coaches, certified athletic trainers, sports nutrition staff, and other support staff (Egan, 2019). On the other hand, these students have extra pressures as they balance their academic identity with their athletic identity (Egan, 2019).

Student-athletes have expectations from parents, coaches and peers to win, as they are often placed in the spotlight (Egan, 2019; Gulliver, Griffiths & Christensen, 2012). Balancing training schedules, competition days, exams, assignments, peer relationships, family, and more, can have a major impact on one's mental health (Egan, 2019). Previous

---

<sup>1</sup>Undergraduate Student, Honours Social Psychology Program, Faculty of Social Sciences, McMaster University, Hamilton, Ontario, Canada

research has discovered that exercise and setting reachable goals are also shown to act as a protective factor against poor mental health (Egan, 2019). Thus, we do not aim to dismiss this notion that there are tremendous benefits to being a student-athlete.

Our study sought to examine if the student-athlete population are aware of the social support resources that are offered to them on campus, as well as perceptions of these services, including access and availability. Our findings indicated that there was a need for improvement in the area of awareness promotion. We hope that the data that we collected through the online anonymous survey would help us to provide feedback about the perceptions of social services on campus within the McMaster athletic community. Overall, our thesis results indicated that there was a need to look into awareness promotion, mobilization of help-seeking behaviours amongst student-athletes, and the incorporation of specialized services for student-athletes within the McMaster athletic department itself. Notably, we faced contradictions which will be expanded on in the work to follow.

## Literature Review

### Stigma

Stigma is defined as “negative thoughts, feelings, and behaviors toward individuals or groups that possess characteristics or engage in behaviors that are viewed by the larger society as unacceptable and/or inadequate” (Wahto, Swift & Whipple, 2016, p. 87). In this case, having a mental health concern or a mental illness can be a reason as to why student-athletes refrain from accessing social support services offered on campus. Hilliard, Redmond & Watson (2018) examined the differences between stigma in help-seeking behaviors towards the counseling of student-athletes and non-athletes. Student-athletes are often indicated as a vulnerable population as they balance academic and sport-performance pressure, along with injury and interpersonal relationships (Hilliard et al., 2018). Researchers suggest that a long history of stigma around mental illness has impacted negative attitudes about counselling (Hilliard et al., 2018). A possible explanation is the nature of the athletic culture that is stereotypical in masculine orientation, which can cause athletes to view help-seeking behaviours as a weakness (Hilliard et al., 2018). Knowing more about the levels of stigma that student-athletes face compared to non-athletes can help identify an appropriate intervention for the student-athlete population (Hilliard et al., 2018). It is important for researchers to find effective interventions against stigma as stigma is highly associated with attitudes (Hilliard et al., 2018).

Traditionally, the well-being of student-athletes has only been regarded in relation to physical health and the influence on their performance in sports and academics (Watson & Kissinger, 2017, p. 153). For instance, in the National Collegiate Athletic Association (NCAA), division levels were viewed as impacting the degree of comfort a student-athlete would have in accessing mental health services (Moore, 2017). Furthermore, Division 1 athletes felt significantly less comfortable seeking mental health services in comparison to Division 2 or 3 athletes (Moore, 2017). This could be due to athletes in a higher division wanting to maintain a higher status in their respective sports and would not want to jeopardize their label by being associated with having a mental illness. A longitudinal survey study found that student-athletes experienced most changes in their mental health during the peak of their competition season (Sheehan, Herring & Campbell, 2018). In

general, university students are susceptible in their mental health due to the transition from their at-home lives to university life (Gavrilova & Donohue, 2018, p. 285).

Student-athletes were found to have differences in mental health compared to non-athletes during their athletic season (Sheehan et al., 2018). The demanding lifestyle of student-athletes means they may be more at risk for disturbed moods, depression and anxiety, and insomnia (Sheehan et al., 2018). There are numerous barriers that student-athletes face for not seeking treatment which includes stigma, a lack of time, and a less favourable attitude towards help-seeking when compared to non-athletes (Bird & Chow, 2018, p. 348). As a result, Gavrilova & Donohue (2018) recognize that “sport culture and social stigma often perpetuate mental health as a sign of weakness, which causes athletes to avoid seeking mental health providers” (p. 284). In comparison, Bird & Chow (2018) add that student-athletes are under-reporting ill-being symptoms due to the stigma associated with mental illness.

With these kinds of attitudes and norms, it has fostered the underutilization of counseling services by NCAA student-athletes. According to Moore (2017), “there are concerns about whether or not college athletes feel comfortable seeking help for a behavioral health problem” (p. 132). It is evident that there is a fear of seeking mental health services and also the fear of teammates discovering that they are in treatment. Hence, the fear of being considered weak continues to prevent student-athletes from seeking assistance (Van Slingerland, Durand-Bush & Rathwell, 2018). For example, Canadian university football players unanimously reported that mental illness is perceived as a reflection of weakness, and showing compassion or understanding for a teammate with a mental illness will put athletes at risk of being viewed by their peers as “weak-minded” (Van Slingerland et al., 2018, p. 162). The challenge here is that mental health is not openly discussed within this population due to its associated stigma.

### **Self-Stigma**

Self-stigma is the “negative attitudes toward oneself for engaging in a certain behavior, has been hypothesized to be the result of internalizing perceptions of public stigma” (Wahto et al., 2016, p. 87). Consequences of self-stigma may include “a diminished self-esteem, self-efficacy, and overall confidence in one’s future” (Bathje & Marston, 2014, p. 1714). Nikolaus A. Dean (2019) spoke of feeling a sense of defeat in relation to not being able to play on his athletic team following an invisible head injury. Dean (2019) identified his athlete title was his master status and with that stripped from him, his well-being was jeopardized. This of course could not be a circumstance that has only affected one athlete. According to the United States National Institute of Mental Health, “stigma is the primary impediment to seeking treatment for mental illness” (Kaier et al., 2015, p. 736). Bird & Chow (2018) explain in broader terms that self-stigma is the result of an individual labeling themselves as socially unacceptable, which leads them to avoid accessing social services. Bird & Chow (2018) and Bathje & Marston (2014) have both recognized that self-stigma and public perceived stigma are interrelated. For instance, Bathje & Marston (2014, p. 1713) identify that self-stigma exists within the context of public stigma. In comparison, Bird & Chow (2018, p. 347) mention how “stigmatization from others is a significant positive predictor of self-stigma”. It is evident that self-stigma stems from what occurs from the public perceived stigma. If there is a negative association with accessing

mental health services on campus, student-athletes may internalize the stigma of mental unwellness and avoid seeking help.

To highlight, Bird & Chow (2018) touch on self-stigma being negatively associated with attitudes towards counselling, and positively related to willingness to seek help. The problem this presents is that self-stigma is said to be primarily holding back student-athletes from seeking mental health services. In order to rectify the self-stigma that student-athletes endure, there must be change in terms of how the public perceives mental unwellness and the accessing of social services. Van Slingerland et al. (2018) recognizes the importance that more work must be done to normalize the conversation of mental struggles and treatment in student-athletes. Furthermore, post-secondary institutions should consider mental health screening as part of their pre-season examinations (Van Slingerland et al., 2018).

### **Public-perceived stigma (stigmatization by others)**

Public stigma refers to “the negative attitudes that one believes others will hold toward them for engaging in a certain behavior” (Wahto et al., 2016, p. 87). Public stigma also influences attitudes around help-seeking behaviours (Hilliard et al., 2018). Psychology has focused on mental illness from more of a negative perspective, emphasizing that mental health services are for individuals with a mental illness (Gavrilova & Donohue, 2018). This is problematic as it may cause individuals to stay away from such services. Public stigma around help-seeking behaviour infers that society holds perceptions, stereotypes and negative beliefs about people who seek out social support services (Hilliard et al., 2018).

Help-seeking behaviors that are associated with negative stereotypes have been found to influence negative attitudes in student-athletes (Hilliard et al., 2018). Hence, when public stigma is internalized by the individual, the individual will develop a stigmatized idea of the self (Bird & Chow, 2018). For example, stigma coming from coaches and teammates can act as a barrier for student-athletes when seeking professional psychological help (Wahto et al., 2016). Specifically, female participant’s scores represented “less perceived public stigma compared with male participant’s scores” (Wahto et al., 2016, p. 90). However, the results from our study contradicted these statements. The participants were asked in the survey, “Is there a negative perception associated with student-athletes who access social support services?”, and 82% of them disagreed that there is a negative perception with accessing social support services. Evidently, public stigma is not always a prevailing matter affecting student-athletes and how their peers identify them.

In order to prevent public stigma, Van Slingerland et al. (2018) and Gavrilova & Donohue (2018) mentioned implementing programs focused on promoting positive mental health and stigma-reducing strategies. Although Van Slingerland et al. (2018) mention that programs should be in place to reduce the mental illness stigma within the athletics community, there are no recommendations on how these programs will run or even work in promoting mental health for student-athletes. Nonetheless, it is apparent that public criticism has a large impact on how student-athletes will utilize social support services offered to them on campus.

### **Facilitators and barriers to help-seeking**

Theories around competitive sports often focus on the influence of motivation, specifically on intrinsic and extrinsic motivation (Sheehan et al., 2018). Motivation suggests individuals have a need to satisfy their basic psychological needs, such as autonomy and social relatedness (Sheehan et al., 2018). Motivation is heavily influenced by social-environmental conditions (Sheehan et al., 2018). Athletes have been found to be motivated to maintain their dual identities, and motivation has been linked to long-term mental health outcomes (Sheehan et al., 2018). Internal and external motivation can also help researchers to better understand and predict student-athletes help-seeking behaviours.

### **External stressors**

There are several factors that come into play when student-athletes seek social support services including gender, stigma, peer norms, and privacy (Moreland et al., 2018). In order to understand how student-athletes decide whether or not they will use social services, it is important to look at their social environments. Using the socio-ecological framework, “individuals make health decisions and enact health behaviours inside a complex social environment; the social environment influences these individuals and they, in turn, affect their social environment” (Moreland et al., 2018, p. 59). Thus, the opinions and sociocultural views on mental health shared by a student-athletes social environment can either facilitate or barricade one’s decision to use such services. Moreland et al. (2018) identify how stakeholders, specifically, influence the decision-making process student-athletes undergo. Stakeholders include “athletes, parents, coaches, teammates, athletic trainers, administrators and the collegiate sporting environment facility” (Moreland et al., 2018, p. 65). Moreland et al., (2018, p. 65) found in their systematic review that some athletic trainers “lacked a formal referral process inside their athletic department”. This becomes problematic when student-athletes are unable to follow up with mental health concerns due to lack of information that should be provided by trusted sources. Athletic administrators have a significant amount of control and input regarding the variety of mental health services available to their students (Moreland et al., 2018). This systematic review highlights the importance of stakeholders in student-athletes’ ability and choice to accessing social services.

Student-athletes often encounter demands and expectations that are unique to their experience as student-athletes as compared to non-athletes (Gavrilova & Donohue, 2018). For instance, student-athletes are often “restricted to social and occupational opportunities due to training commitment and travel, scheduling and time constraints” (Gavrilova & Donohue, 2018, p. 286). Their commitments consist of physical sports training, maintaining superior fitness for better performance, maintenance of multiple relationships within or outside the team, restricted financial opportunity and avoiding injury (Gavrilova & Donohue, 2018). In addition, monitoring their nutrition and body composition and coping with physical fatigue is often unavoidable (Van Slingerland et al., 2018). These components would then affect a student-athletes academic, emotional, and personal goals (Van Slingerland et al., 2018).

Consequently, a student-athlete’s stress levels can be affected both physically and mentally. The problem here is that student-athletes are so constrained with what they are expected or allowed to do, that their mental health or accessing mental health services is

not considered a part of their duties for better sport performance. With such strict schedule demands, this can result in athletes believing that disclosing a behavioural health risk could result in loss of playing time, loss of scholarships, risk of damaging relationships with teammates, and cause disappointment in the eyes of a coaching staff and their informal support network (Moore, 2017, p.133). Hence, an athlete's mental health could potentially deteriorate over time if their busy schedule does not allow for personal time. Our study looks at how much time is spent with sport affiliated activity in relation to stress management.

Another external stressor that a student-athlete may face is the relationships they have with their teammates, family, or peers. Poor relationships are found "to interfere with sport performance and the overall well-being in athletes" (Gavrilova & Donohue, 2018, p. 287). Negative feedback can induce negative emotions. For instance, negative feedback from teammates has been shown to induce negative emotions and perceived stress in athletes (Tomalski et al., 2019). To add, negative feedback from family and lack of understanding of one's suffering can lead to depression in student-athletes (Dean, 2019). Another form of feedback may come from coaching staff, and "non-supportive coaching behaviors have been associated with athletes' negative self-talk" (Gavrilova & Donohue, 2018, p. 287). As student-athletes are also young adults, they are going through the development of their identity via "life events such as leaving home, establishing independence (i.e. living on their own), and beginning romantic relationships" (Tomalski et al., 2019, p. 122). Positive-peer support often results in positive mental health outcomes (Tomalski et al., 2019).

Consequently, "due to having inadequate support networks or possessing insufficient coping skills, many young adults will struggle in relation to these events and endure various forms of psychological distress (i.e. anxiety)" (Tomalski et al., 2019, p. 122). With regards to student-athletes in post-secondary, "their risk for such distress may be elevated due to a variety of unique environmental and developmental factors they encounter" (Tomalski et al., 2019, p. 122). These results suggest that coaches, teammates, family members, and friends should be strongly considered when supporting the mental health of student-athletes.

### ***Spotlight (lack of privacy)***

Another common variable in student-athletes help-seeking behaviors is their lack of privacy (Lu et al., 2016). It is common for student-athletes to hold a great sense of pride for their respective sport (Lu et al., 2016). Often, individuals who are recruited into post-secondary varsity athletics are generally held to a high level of expectation in relation to execution of performance styles. Being a student-athlete has its advantages and disadvantages, but with regards to accessing mental health support, it becomes an enormous disadvantage creating a major barrier (Lu et al., 2016). Not only do student-athletes have to be concerned with how the culture of sport portrays their need for accessing mental health resources, but they are also aware of how others could respond (Lu et al., 2016). As a result of being involved with varsity athletics, the majority of student-athletes "are often well known on campus, hence, may not have privacy if seen walking into campus counselling" (Kaier et al., 2015, p. 736). If student-athletes are "seen at a mental health clinic, they may be labeled as mentally ill and stigmatized" (Kaier et al.,

2015, p. 736). The aforementioned is of importance and should be kept in mind in relation to our upcoming findings.

Lu et al. (2016) conducted a study in which they discovered that pressure from the public and media is a significant source of stress. This is something that further increased our interest on this subject as it is imperative that such stress be aimed towards reduction. Student-athletes have their pictures posted around campuses and are often seen in uniform which puts them in a public spotlight (Lu et al., 2016). This produces difficulties to seek out any social support resources on campus, as student-athletes are more identifiable than the non-student-athlete population (Lu et al., 2016). Behaviors could include avoidance or paranoia in seeking out the resources available to students (Lu et al., 2016). Being in the spotlight as a varsity student-athlete creates a major barrier to accessing mental health support due to the lack of privacy.

### ***Most Prevalent Internal Mental Health Stressors Amongst Varsity Student-Athletes***

Mental well-being and its indications have become researched since mental illness diagnoses continue to climb (Ryan et al., 2018). The American Psychiatric Association (APA, 2018) defined mental illness as any changes regarding one's actions, thoughts, or emotions which can cause harm to the individual and their function during routines in their daily lives (Ryan et al., 2018). Approximately 19.4% of young adults in America live with mental unrest, often in the form of depression and/or anxiety (Ryan et al., 2018, p. 67) and student-athletes face a higher risk of dealing with mental illness such as these and more (Ryan et al., 2018). Student-athletes have additional stressors in comparison to their non-athlete peers, such as the stress to win their matches, as well as the pressure to excel in their academic careers while partaking in a sport sector that has become increasingly commercialized; college sports (Ryan et al., 2018, p. 71). These external stressors could cause an athlete's existing mental unrest to worsen or may even act as a catalyst to a new psychological disturbance on the individual (Van Slingerland et al., 2018, p.151). Stress is inevitable when it comes to playing competitive sports however, chronic stress that athletes experience is harmful to student-athletes and could lead to burn out (Lu et al., 2016).

According to Smith's (1986) Cognitive-Affective Model of athletic burnout, burnout is noted as the result of chronic stress (Lu et al., 2016). The model suggests burnout is broken into 4 stages; Situational which denotes conflicting demands, over training, and parental/peer expectations, Cognitive which denotes interpreting demands, access to resources, and potential consequences, Physiological which denotes responses like anxiety, insomnia and illness and Behavioural which denotes withdrawal and decreased performance (Lu et al., 2016). In other words, stress contributes to the physical and mental well-being of individuals (Gavrilova & Donohue, 2018), which in turn can also contribute to them experiencing mental health illnesses such as anxiety, depression, substance abuse and depression which are the four most prevalent among student-athletes (Ryan et al., 2018). In comparison to our study, 65% of participants strongly agreed that varsity student-athletes have an added stress to their daily lives and believe it could even affect them in some academic years versus others. These results confirm that stress could be affecting the student-athletes' physical and mental health.

Depression is a major source of mental illness amongst student-athletes according to the American Psychological Association in 2017 (Ryan et al., 2018). It is a medical illness

that negatively impacts one's feelings, thought process and actions (Ryan et al., 2018). An individual is diagnosed with depression when a depressive state endures for a minimum of two weeks (Ryan et al., 2018). Nearly 1/4<sup>th</sup> and higher in Division 1 and football athletes in all divisions report being mentally strained or exhausted from the pressures associated with their sport (Ryan et al., 2018, p. 68). In comparison, Van Slingerland et al. (2018) reported that approximately 30% of student-athletes felt exceedingly overwhelmed in the last 12 months by "feelings of depression and would even have difficulty functioning" (p. 151). Athletes that experience depression face symptoms such as lack of or uncontrollable sleep patterns, lack of concentration, low self-esteem and self-worth, feelings of guilt, weight instability, low energy levels and fixation on death and/or suicidal thoughts (Ryan et al., 2018). In consequence, stress may profoundly affect both the physical and mental health of a student-athlete, leading to the development of depression (Gavrilova & Chow, 2018).

Anxiety is another source of mental illness that is increasing among student-athletes (Ryan et al., 2018). An NCAA study indicated that more than 85% of student-athlete trainers felt that anxiety is a problem among student-athletes (Ryan et al., 2018, p. 70). Likewise, Gavrilova & Donohue (2018) indicate that elite athletes and their coaches ranked anxiety as the most prevalent mental health concern experienced by student-athletes. Furthermore, the 2015 NCAA GOALS survey data indicates that about 30% of student-athletes self-report insurmountable levels of anxiety felt within the last month (Ryan et al., 2018), or 47% within the last twelve months (Van Slingerland et al., 2018). It is characterized by intense worrying or fear of one's future that can impact one's ability to effectively function in their day to day activities (Ryan et al., 2018). It can lead to problems regarding an athlete's appetite, sleep pattern, heart rate, feelings of unease, dizziness and sudden perspiration (Ryan et al., 2018).

There are different elements of anxiety that may affect a student-athlete. They can endure such anxieties as competitive or performance anxiety, which is when one's anxiety is onset by competition or performance (Gavrilova & Donohue, 2018). In addition, "one of the most common anxiety disorders in athletes is generalized or social anxieties (i.e. excessive worrying about everyday things)" (Gavrilova & Donohue, 2018, p. 287). According to Gavrilova & Donohue (2018), generalized or social anxieties are experienced by approximately 6% of student-athletes (p. 287). Anxiety can also root from a student-athlete's living situation that indicates that around "80% of student-athletes consumed alcohol within the last year, with 44% of them (males) partaking in binge drinking (i.e. consuming five or more drinks in one sitting)" (Ryan et al., 2018, p. 71). Hence, "alcohol use in athletes has been found to be positively correlated with illicit drug use" (Gavrilova & Donohue, 2018, p. 288), which go hand-in-hand with mental illness (Ryan et al., 2018). Thus, the fact that student-athletes are more likely than non-student-athletes to partake in these abusive behaviours is very problematic. Another problem that may arise is that marijuana may become increasingly complex because it is now legal in Canada (Gavrilova & Donohue, 2018). Furthermore, in an NCAA participant survey of 21,000 student-athletes, 16% used medication for ADHD, however only half of them had a prescription for it (Ryan et al., 2018). Pain medication follows a similar pattern with 25% of the athletes indicating use of pain medication, many without prescription (Ryan et al., 2018). With the amount of injuries that could occur in a sport, the implications are very



worrying as student-athletes are more likely to be prescribed pain medications such as opioids and/or narcotics versus non-athletic students (Ryan et al., 2018).

The above notations of mental health issues that student-athletes may face, gives an indication of how important it is that student-athletes are made aware of mental health social aids around McMaster University. This not only verifies that student-athletes face mental stressors, but that they may face it more than other students. Furthermore, some of the most prevalent cases that are still faced among student-athletes include sexual violence, bullying, hazing, discrimination and more (Ryan et al., 2018). Thus, implementing measures that address mental health needs in a way that cuts through barriers faced when accessing them is strongly recommended.

### **Canadian vs. American Sports**

Canadian and American undergraduate student-athletes undergo a fairly similar schedule of sports, academics and trying to make enough time for their social life (Moore, 2017). However, the stigma associated with mental health may or may not be the difference between both countries and how they handle or perceive mental health (Moore, 2017). USports is the national sport division for sports in Canada, while the National College Athletic Association (NCAA) is an organization that regulated American College sports teams. Van Slingerland et al. (2018) focused on the levels and prevalence of mental health functioning in Canadian university student-athletes. When assessing the levels and prevalence of mental health for Canadian student-athletes, the “time of year and individual differences (i.e. living situation, substance abuse, year of study, type of sport) were found to have effects on a student-athlete’s mental health” (Van Slingerland et al., 2018, p. 150). In comparison, the NCAA recognizes that the mental health of American student-athletes has been “a growing area of concern” (Ryan et al., 2018, p. 76). Therefore, their goal is to promote positive mental health for American college athletes who “deal with stress and other mental well-being issues” (Ryan et al., 2018, p. 75). This would suggest that gaining insight in both mental wellness and mental illness could assist in better understanding the overall functioning of the student-athlete (Van Slingerland et al., 2018).

On the contrary, Gavrilova & Donohue (2018) understand that college athletes are at risk of mental health concerns, therefore, try to understand an athlete’s willingness to seek help and examine the levels of comfort in accessing mental health resources as it is considerably important. Gavrilova & Donohue’s (2018) focus on the level of competitive sport and its impact on accessing these mental health resources on campus.

In Canada, readily available mental health interventions have been underutilized by student-athletes (Gavrilova & Donohue, 2018). Consequently, this population of students is at a greater risk of experiencing mental illness (Van Slingerland et al., 2018). In contrast, researching comfort with seeking behavioral health services has already been a growing importance in the National College Athletic Association (NCAA) in America (Moore, 2017). Thus, American colleges have placed mental health as the number one health concern student-athletes face (Moore, 2017). The NCAA cares about increasing the comfort levels of student-athletes accessing services to improve their mental health. This is an attempt to avoid untreated mental health concerns that can impact athletic performance, or the development of unhealthy coping strategies (Moore, 2017). However, the Van Slingerland et al. (2018) study argues that “the mental health and well-being of

Canadian student-athletes is understudied, and this can be due to mental health challenges not being openly discussed” (p. 150).

Although the mental health of Canadian university student-athletes remains unexplored, American student-athletes continue to face their own struggles with mental illness and their comfort levels when accessing mental health resources due to stigma (Van Slingerland et al., 2018). As previously mentioned, the college athletes believe that disclosing a behavioural health risk could result in loss of playing time, loss of scholarships, loss of a relationship with teammates, and being the focus of disappointment in the eyes of the coaching staff and their informal support network (Moore, 2017; Leimer et al., 2014). In addition, there is a contrast in comfort levels between high profile and low-profile sports (Moore, 2017). College athletes in high profile sports, like Division 1 sports where one usually holds strong fan-base support, increased media attention, and higher rates of athletic department funding, often feel the pressures and feel discomfort seeking help for a behavioral health risk (Moore, 2017). As a result, American student-athletes are put under pressures that make them feel that their athletic and academic success is more important than their mental health (Van Slingerland et al., 2018).

The Van Slingerland et al. (2018) study was not aimed at identifying in-depth concerns of student-athletes and their overall mental health. Rather, it looked at mental health functioning in USport categories that student-athletes partake in to help further promote the investment of “mental health policies and important standards of practice in Canadian Universities” (Van Slingerland, 2018, p. 153). However, Gavrilova & Donohue (2018) argue in contrast to that idea that focusing on functional levels are indeed unreasonable in assessing forms of mental health treatment. American College sports recognize that college athletes do not feel comfortable seeking behavioral health services (Moore, 2017). Therefore, it is imperative that colleges and universities explore strategies for encouraging college student-athletes to disclose the challenges they are facing and seek the services available to them for those challenges (Moore, 2017). For example, Moore (2017, p. 137) stated that one form of improving the current state of social services would be providing more occupancy for social workers as they are a strong fit for understanding environmental and internal stressors of student-athletes. Similarly, our study found a strong desire for specialized support through trained sport psychologists and services.

## **Interventions**

The struggles faced by student-athletes are unique to them compared to that of the average student (Tomalski et al., 2019). Beyond academic commitments, student-athletes must also schedule time for team practices, training, games, injuries, and team events (Tomalski et al., 2019). Studies have shown this to take up the majority of a student-athlete’s free time with over 20 hours a week being attributed to it amongst other things (Tomalski et al., 2019). With added external and internal pressures, student-athletes are more likely to experience anxiety and depression than non-athletes (Sudano et al., 2017). In order to combat this, research provided by the NCAA suggests that there is a need for an integrated health care model to target the specific needs of student-athletes. Sudano et al. (2017) share three aspects to this model, which are designated as clinical, operational, and financial approaches. The clinical aspect focuses on combining mental health and medical care by requiring a mandatory intake form be filled

out regarding questions involving mental health (Sudano & Miles, 2017). The questions indicated on these forms seek to find out if one has experienced mental health issues in the past and the treatment, they found most beneficial to them (Sudano & Miles, 2017). A similar set of questions are utilized in a screening process that has been enacted by the NCAA for certain departments of student-athletes and will hopefully be dispersed among all (Tomalski et al., 2019). Our findings to come further substantiate that such a method would be of value.

The operational aspect delves into the “how” and asks how to best provide mental health services, what improvements are needed and the effectiveness of each service (Sudano et al., 2017). By mandating specific expectations for how services should be run and who runs them, organizations such as the NCAA will be better able to serve their athletes. As found by Gavrilova & Donohue (2018, p. 284), athletes who mentioned “they did not pursue mental health treatments, believed the providers of these services were not familiar with their culture, and that the interventions would be ineffective” within mental health counselling centers. Thus, a strict protocol which ensures services are not only provided but are also properly informed and vetted would enable students to feel more confident in their choice to use such services when needed.

The NCAA has implemented trained psychologists for certain levels of varsity teams in an effort to provide better, more targeted mental health care as there are instances where budget affects the quality of training that is affiliated with Sport Psychology Management teams (Tomalski et al., 2019). Another idea for improving the current state of services would be the utilization of sport social workers (Moore, 2017). The values and ethics of the social work profession are a strong fit for understanding the environmental and internal stressors impacting college athletes’ safety and well-being (Moore, 2017). Sport social workers would have the competency needed to address the unique needs of each college athlete, which includes competition level and other demographic criteria (Moore, 2017). The goal in implementing highly trained professionals in some areas is to promote more confident health-seeking behaviours and to aid in the reduction of mental health suffering amongst student-athletes (Tomalski et al., 2019). The eventual hope is for there to be such professionals attending to all levels of sport-culture due to positive outcomes (Tomalski et al., 2019). Our findings to come also substantiated this with there being a call for more specialized incorporation within the faculty pertaining to mental health.

Finally, the financial aspect of the integrated care model seeks to address mental health gatekeepers, specifically the athletic department, to invest in their social services (Sudano et al., 2017). Departments who invest in these services and follow a more comprehensive health care model will be better able to provide for their student-athletes (Sudano & Miles, 2017). Studies such as these are essential to improving “the mental health services provided to student-athletes [by improving access and likelihood of seeking care]” (Sudano & Miles, 2017, p. 266). Gavrilova & Donohue (2018, p. 285) found that “NIMH website indicated that out of 100 research funding opportunities, only 17 of these projects focused on prevention of problems and none focused on wellness”. The NCAA and the National Athletic Training Association which provides frontline aid for physical and psychological health has noted that the identification of mental health ailments, referral to a mental-health professional by coaches and teams, and the treatment for at-risk student-athletes is very important (Tomalski et al., 2019). However, this is not what often takes place within sport culture making it evident that more research

is needed on solutions that provide better access and ease when students are seeking social services (Tomalski et al., 2019). Furthermore, training of faculty and the awareness-breeding of such issues needs to be more intensely enacted.

## Theory

### Everett Hughes - Master Status

The American sociologist Everett C. Hughes is known for his work defining 'master status' and his focus on race among other social identities. Hughes (1971, p.132) shares that "status assigns individuals to various accepted social categories; each category has its own rights and duties". Thus, we can assume that a student-athlete's status as such provides them their own rights and duties. He describes master status as a defining characteristic or label of an individual's social identity (Hughes, 1971). This status and social identity define individuals in social environments and can influence their behaviour in front of others and is reinforced by an individual's "consistent conception of himself in relation to other people" (Hughes, 1971, p.132). Thus, the student-athlete can be said to be influenced by the status that they hold, which then can affect behaviors akin to help-seeking. Hughes (1971) describes a master status as a social label and not a personal choice. A social label of which individuals have little control over. These statuses are often determined by the social groups that the individual surrounds themselves with (in-group) as well as those outside their group (out-group) (Hughes, 1971). Pertaining to the student-athlete, the in-group could be considered their team-mates and faculty members, where the out-group could be considered anyone outside of that realm. Individuals statuses are further constituted when their actions fall in line with assumed social practices (Hughes, 1971). Master status is important and essential to this project as it influences all aspects of one's life and behaviour (Hughes, 1971).

In order to better understand student-athletes, one must understand how their master status can influence their social environment, behaviour and ideals. This can include how they identify in front of their peers, teammates, coaches, and parents. If participants identify as a student-athlete, there are many roles and responsibilities that come with it (Dean, 2019). In light of our research project, identifying an individual's master status helped to determine whether it influenced their decision to access social support services or stray away from the discussion of mental health in general.

In order to operationalize Hughes master status, we asked participants how strongly they identified with their 'student-athlete' status, if at all. If a correlation was found between their student-athlete status and personal identity, we could then identify the role master status plays in the individual's lived experiences.

### Howard Becker - Deviance and Labeling theory

Howard Becker is a sociologist who has contributed great insight to the theoretical framework of deviance. Becker (1963) is the author of the "Outsiders" which has served as a guidebook of deviance and an introduction to labeling theory. Becker (1963, p. 4) had defined deviance as "anything that varies too widely from the average". The average is subjective, a process of meaning making that is not universal. A deviant label is applied to "particular acts or people" (Becker, 1963, p. 4), and the deviant behaviour is calculated by "the distance of the behaviour involved from the average" (Becker, 1963, p. 5). Therefore, if an individual ignores those guidelines then they are failing to obey the social

norms and thus become deviant (Becker, 1963). This is a notion that we believe can be attributed to the reality of a student-athlete who may be seen as falling outside of the athletes' norms were they to express what may be viewed as weakness. Social interactions are imperative for labelling to take place, although it is not an individual's intention nor objective to be labelled (Becker, 1963). Becker (1963, p.3) had mentioned that a deviant act only occurs when there are certain characteristics of the person that makes it necessary. Thus, implicating that anything outside of their expectations is considered rule-breaking (Becker, 1963).

When analyzing student-athletes and perceptions of accessing social support resources on campus, we should understand how the deviant label is applied, and how that label influences a deviant behaviour to occur. Social interactions are a necessary component of deviance as a student-athlete's peers, teammates, coaches and parents each have a particular expectation of them (Becker, 1963). As mentioned, anything outside the norm is rule-breaking (Becker 1963). If an individual within the sport culture discovers that a student-athlete is seeking help or is reaching out to someone about their mental health, the help-seeker is often then placed at a risk of being considered deviant amongst their community (Becker, 1963). Therefore, there is the risk of being labelled due to the act being considered deviant. However, keep in mind that this is dependent on how everyone else around them reacts to it (Becker, 1963). The student-athlete becomes an "outsider" when they are judged by others as deviant and stand outside their sports circle as a "normal" member of the group (Becker, 1963). For some, accessing support services may not be considered a social norm, and for that reason, a label is attached to student-athletes who choose to access social support services (Becker, 1963).

Becker (1963, p. 32) pointed out that when you are recognized as being deviant in society there are consequences for the individual's self-image and social standing. Therefore, a varsity athlete may choose to accept their label as 'deviant' by privately accessing social support services, or accessing the services knowing their teammates are labelling them (Becker, 1963). In a situation where the team knows the student-athlete is deviant, the deviant can then accept their label and become involved with an organized deviant group (Becker, 1963, p. 37). In this case, the organized deviant group would be composed of other student-athletes or non-student-athletes who access the social support services on campus. With this movement, Becker (1963, p. 38) recognized that the individual has the ability to have a positive and powerful conception of the self and a sense of common fate in the deviant group. The only problem that may arise is the discrimination from the team when discover that a teammate is associated with an organized deviant group (Becker, 1963). In which case the individual may reconsider their associations with the deviant group or the normative one (Becker, 1963).

In correspondence to our research project, one of our goals was to identify the deviant labels that are attached to seeking out social support services. Deviance and labeling theory were important to incorporate in our research study because it applies to the labels internalized by student-athletes when contemplating the accessing of social support services.

To operationalize Becker's (1963) ideas of labeling theory, our survey questions tested what student-athletes believe is a deviation from the "norm" in terms of socially created norms of behaviour. We specify in our questions what types of labels the student-athletes may have internalized. From these results, we engaged in determining whether the

internalization of labels is associated with accessing social support services. Once we had collected our data, we could then quantify whether labelling is strongly or poorly correlated with student-athletes seeking social support health services or at the very least gain interest into the relationships that exist between these two phenomena.

### **Goffman - Presentation of the self**

Erving Goffman's (1959) main interest was to analyze the variety of ways individuals presented themselves in everyday social interactions (Goffman, 1956). He coined the term "dramaturgy" in which he discloses his belief that each individual in a given social interaction puts on a performance (Goffman, 1956). Individuals hold several roles in their everyday life, causing them to manipulate how they act in certain environments (Goffman, 1956). Goffman believes that each individual in any interaction performs on two stages: the front stage and the backstage (Goffman, 1956). Goffman defines the front stage as "that part of the individual's performance which regularly functions in a general and fixed fashion to define the situation for those who observe the performance" (Goffman, 1956, p. 22). Athletes face pressure from society in a variety of ways which can affect their psychological health because "social pressures that are placed on athletes to present themselves as stoic and strong- pressures that directly contradict societal views of mental health problems and help-seeking as a sign of weakness" (Wahto et al., 2016, p. 87). Dean (2019) was a Canadian student-athlete who wrote about the personal mental health and physical health challenges faced when it came to a serious head injury and the fact that he felt the need to play the stoic athlete in light of his silent suffering. He states that the athletic identity is one that is socially put in place onto student-athletes and becomes socially and psychologically bound to them, shaping their perceptions and their sense of self (Dean, 2019). Often, student-athletes are pressured to achieve excellence in stoicism which causes their psychological stress to increase (Dean, 2019) and leads to, "college athletes underutilizing psychological services as it may be a corollary of athletics culture that emphasizes self-reliance, and prioritizing the team over self" (Kaier et al., 2015, p. 735). This is problematic in the instances where student-athletes may need help in terms of wellbeing but are unable to seek it due to the above-mentioned.

As mentioned, Dean (2019) was injured and dealing with psychological distress due to his injury. Consequently, he was not able to play the sport in which he deemed the purpose of his life. He would often tell coaches and teammates that he was ready to play, although this was contrary to the doctor reports which revealed that his injury was severe (Dean, 2019). Dean (2019) behaved this way due to fear of tarnishing his athletic identity and not being allowed back in the game (Dean, 2019). Studies have shown that sport culture normalizes, down-plays and romanticizes risk, pain and injury (Dean, 2019). This is an ideology that varsity student-athletes are living up to and this can cause more harm than good, especially in a scenario where harm must be immediately dealt with, whether physical or psychological and the problems begin to snowball (Dean, 2019). As Goffman indicates, "the front region is where the performance is presented, but the back region is where the performance is prepared" (Goffman, 1956, p. 238). This indicates that those who are constantly in the front stage, like that of student-athletes, may not be getting the help they may need to deal with the issues that they face in the backstage and this is problematic.

The backstage holds a uniquely significant amount of meaning for the performer in comparison to the front stage (Goffman, 1956). Goffman (1956, p. 112) designates the backstage to be “relative to a given performance, where the impression fostered by the performance is knowingly contradicted as a matter of course” and “the place where the performer can reliably expect that no member of the audience will intrude”. The backstage includes one’s own beliefs and thoughts, such as internalized negative attitudes toward social aid services (Wahto et al., 2016, p. 86). The backstage is where an individual’s internal self can be seen (Dean, 2019). Behind closed doors, Dean (2019) was dealing with a loss of identity, low self-esteem, a shunning of loved ones, and a lack of drive due to his front stage being jeopardized by an injury that he could not hide from other athletes and coaches due to Doctor involvement. The very involvement which he initially tried to neglect because he perceived the doctor as the cause of his inability to play the role that he loved (Dean, 2019). This speaks to the belief that is held among many student-athletes; when individuals help-seek for mental health reasons, they are weak and oftentimes individuals in the sport-culture will attribute this to themselves (Wahto et al., 2016, p. 87).

Furthermore, it is common for most individuals within sport culture to admire athletes that they aspire to become one day during the beginning stages of shaping their athletic identity (Dean, 2019). Individuals in this situation often look at traits such as the level of performance, passion, and their commitment to their respective sport and mimic it (Dean, 2019). Goffman (1956, p. 35) refers to this idea of idolization as a way of one’s socialization and being “molded and modified to fit into the understanding and expectations of the society in which one is presented”. Hence, athletes hold a large commitment to their sport and push hard to enhance their performance to reflect their idols persona, which in itself is stress-inducing if one feels that they are lacking (Dean, 2019). Due to high sport-culture expectations, athletes tend to reject the idea of receiving mental-help and social support to help minimize the chances of others portraying them as worthy of the “athlete” label (Dean, 2019).

The majority of student-athletes classify their athletic team as a second family yet cannot readily go to them for mental-health help. In comparison, Dean’s (2019) teammates would make remarks about him being well enough to get back into the game without regard for his mental state. Additionally, the coach would make Dean (2019) feel as though he were a bother when he went to inquire about getting back in the game, hinting at the fact that Dean (2019) had become out of shape during his time in recovery and smelled of alcohol. This exemplifies the idea of harm being down played in sport culture and the insensitivity to the silent struggles of an athlete who no longer fits the ideal. As athletes continue to aspire to achieve greatness, one must realize that their mental health is just as important as their performance. At the time when athletes start to experience high levels of psychological distress, often the technique of impression management is practiced all the more (Goffman, 1956).

Goffman (1956, p. 113) outlines impression management as that realm where “the passage from the front region to the back region”. is kept closed-off to the audience or the instance where the back-stage in totality is hidden from the audience Furthermore, impression management is often performed by individuals in, “a social establishment in any place surrounded by fixed barriers to perception in which a particular kind of activity regularly takes place” (Goffman, 1956, p. 239). This social environment for athletes can

be seen as any space where they are visually designated as athletes, especially in the midst of their team, which is often the majority of the time as athletes tend to internalize their title. Most athletes hold a fear of being stigmatized by coaches, teammates, student peers, and fans so they manage how they present themselves to those groups and anyone affiliated with those groups (Wahto et al., 2016, p. 87). As athletes continue to use impression management repeatedly, it then becomes a natural routine for them and makes it harder for them to begin help-seeking behaviour (Goffman, 1956). This may explain a section in our findings where we met a contradiction between a positive perception of social support services and actual mobilization of help-seeking behaviours. Goffman's (1956) concept of, dramaturgical discipline, illustrates how varsity student-athletes may be dealing with behind closed doors. Therefore, it illustrates the need for interventive measures to cut through help-seeking barriers of today as those silent sufferings lead to severe mental-health complications. There is no surprise that there is a high prevalence of mental health concerns among varsity student-athletes that are often not addressed (Dean, 2019).

To operationalize Goffman's concept of impression management in the Front and Backstage, we incorporated survey questions that tested for one's identity affiliation and whether or not their sport culture attitudes on perception aligns with their actual lived experiences. Once we had collected and analysed the data collected quantitatively, we then were able to see whether our hypothesis regarding help-seeking behaviours being impacted by stigma held a positive correlation or at the very least, gained interest into the relationships that exist between these two phenomena.

### **Methodology**

Our research was quantitatively based and focused on understanding student-athlete perceptions on seeking social support services regarding mental unwellness. Specifically, our research question was *what perceptions do McMaster University varsity student-athletes hold toward social support services on campus?* The research was approved by the McMaster Research Ethics Board (MREB#: 0327, 2012 67). After we received ethics approval from the McMaster Research Ethics Board (MREB) we began the primary research process. The research utilized an anonymous online survey hosted on the MREB approved platform, LimeSurvey. We used convenience and snowball sampling to gather our data and focused on variables such as awareness, identity perception, help-seeking, well-being, relationships and accessing of social support services among varsity student-athletes. The survey included multiple choice and Likert scaled questions, and the likert scale used ranked responses from 1-5. These responses corresponded with the answers (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, (5) strongly agree. We chose to focus on the varsity athlete population at McMaster University as their time commitments and social pressures seemed to be more elevated than their non-athlete counterparts. In the end, we collected a sample size of 75 McMaster varsity student-athletes.

The research process took an eight-month commitment which began in mid-September 2019 and lasted until mid-April 2020. The first step we took was choosing a topic of interest and determining a research question from that topic. We decided our topic would be about McMaster varsity student-athletes and their utilization of social support services on campus. We then decided to do a content analysis of research



previously done and picked peer-reviewed articles that shed light on our topic. From there we began our literature review by determining what themes were most prominent throughout the research. These themes included stigma (self-stigma and perceived public stigma), facilitators and barriers to social support services (external and internal stressors), Canadian versus American sports, and intervention. Afterwards, we divided sections of our Ethics Proposal to meet each member's strengths and submitted our proposal October 23rd, 2019. We made several revisions to our proposal and were granted Ethics approval on November 13th, 2019.

We began data collection on November 15, 2019. In order to get in contact with student-athletes, we contacted coaches via email which is provided by McMaster's Department of Athletics and Recreation Staff Directory (<https://marauders.ca/staff.aspx>). We also retrieved publicly available contact information of team captains of their respective sports. We shared the survey information with each captain and asked that they share the survey with their teams. We also used posters with quick response codes (QR codes) that were computerized through the online website QR generator ([www.qr-code-generator.com](http://www.qr-code-generator.com)). This allowed student-athletes to easily engage and access the poster through various online methods, quickly and discreetly if necessary. The posters were posted in the Student Centre and the David Braley Athletic Centre. We obtained permission and approval stamps from McMaster Student Union (MSU) and the MREB to post in said areas. In order to maintain anonymity, students were not asked their names or any truly identifying characteristics. The online survey prompted participants to check a box stating that they were consenting to anonymously participate in the survey. Participants were free to withdraw from the study before submitting the survey online; after submitting respondents could not be withdrawn. We met our target of 75 participants on December 16th, 2019 and ended data collection promptly thereafter. We removed all posters in the student Centre and David Braley Centre the following day.

On February 2nd, 2020 we began our data analysis using LimeSurvey and the Statistical Package for the Social Sciences referred to as SPSS. This software was available to us through computer labs on campus which we met at weekly. Due to our limited knowledge on SPSS, we attended a workshop for clarification and met with Data Analysis Support Hub (DASH) services for tutorials in navigating the software. In SPSS, we cleaned the data and looked at descriptive statistics to analyze our findings. It allowed us to customize variable names, types, titles, graphs and identify trends that in turn helped us form conclusions. We concluded data analysis on February 28th, 2020 to begin our poster. We recreated graphs from SPSS into Excel to achieve a more appealing aesthetic. Our poster included an introduction/topic of interest, research question, research methods, four graphs, discussion/significant insights and a summary.

We began our final essay on March 18th, 2020 and divided the discussion sections into different themes relevant in our findings. These themes included student-athlete's relationship to athletic faculty, awareness, specialized services, identity salience, athletic and academic demands, perception, stress. In these sections, we discussed our findings in relation to previous studies and our literature review. In the results section. Due to the university closure, we were unable to continue our work on SPSS and transfer our statistical findings from there to our paper. Despite this, we carefully analyzed our already-available findings and discussed them in-depth in the results and discussion section. Our final research paper included an introduction, a literature review, a methodology section,

a results section, a discussion, significant insights and a conclusion. We submitted our final paper on April 8th, 2020.

There are some ethical concerns that we noted for participants partaking in the survey including psychological and social risks. Psychological risks included participants feeling embarrassed, worried or upset after answering questions in the survey. These risks were minimized by ensuring that all questions were broad and unidentifiable when answered. We avoided using terminology that might be seen as triggering or stressful. We also provided information for those seeking follow-up support. Social risks were present when participants engaged with our posters on school premises. By engaging with posters, individuals risked being seen by others in their sport-community. There was a possibility of students being stigmatized or frowned upon for interacting with our poster and study. Our research presented no physical risk as the survey was online and did not involve any opportunity for injury or physical harm. Individuals had the opportunity to take the survey at the time and place of their choosing. This allowed for increased anonymity and privacy when taking the survey, which also reduced psychological risk.

We prepared for the challenge of self-reported bias, as we were aware of the possibility of inaccurate assessments respondents could have about themselves and the questions they were answering. In order to avoid this, we made our questions very clear and focused. We defined all lay terms and were descriptive when necessary. We also ensured anonymity by allowing the survey to be done on the respondents' own time and location of their choice so that respondents felt at ease when answering questions about themselves.

In addition, a member of our group, Elias Srouji, is involved within the McMaster athletic department which could have indicated researcher bias or participant bias due to the athletic department being familiar with him. In order to avoid this bias, our group members ensured Elias was not involved in the recruitment of participants in any form. He did not send emails to coaches nor set up posters in the McMaster University Student Centre or David Braley Athletic Centre. This was done as a preventative measure to ensure respondents were not influenced or persuaded by his role in the athletic department.

In summary, our goal with the methodological approach was to be as detail-oriented and thorough as possible. Using an anonymous survey, we were able to collect all 75 respondents' answers confidentially. The research process took eight months, involving a proposal, ethics board approval, data collection, and data analysis, resulting in a final paper. Overall, all the necessary ethical risks were accounted for and prevented to the best of our ability. The section that follows includes results and discussion.

## **Results**

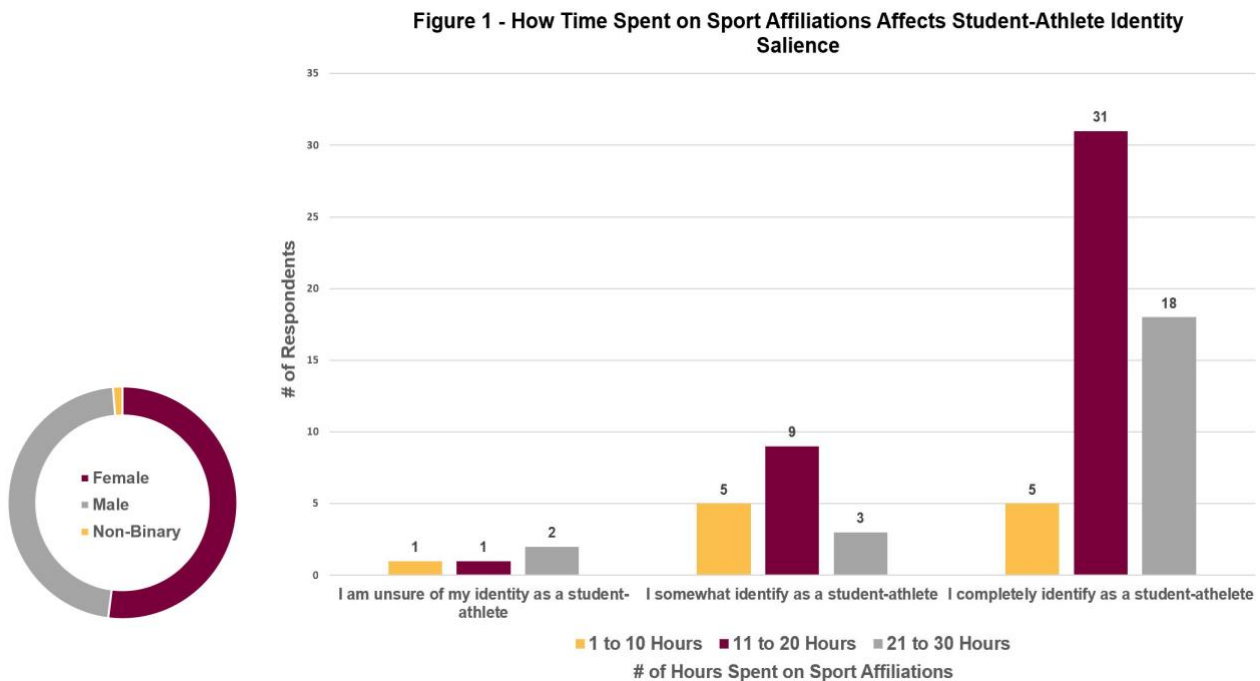
### **Survey Demographics**

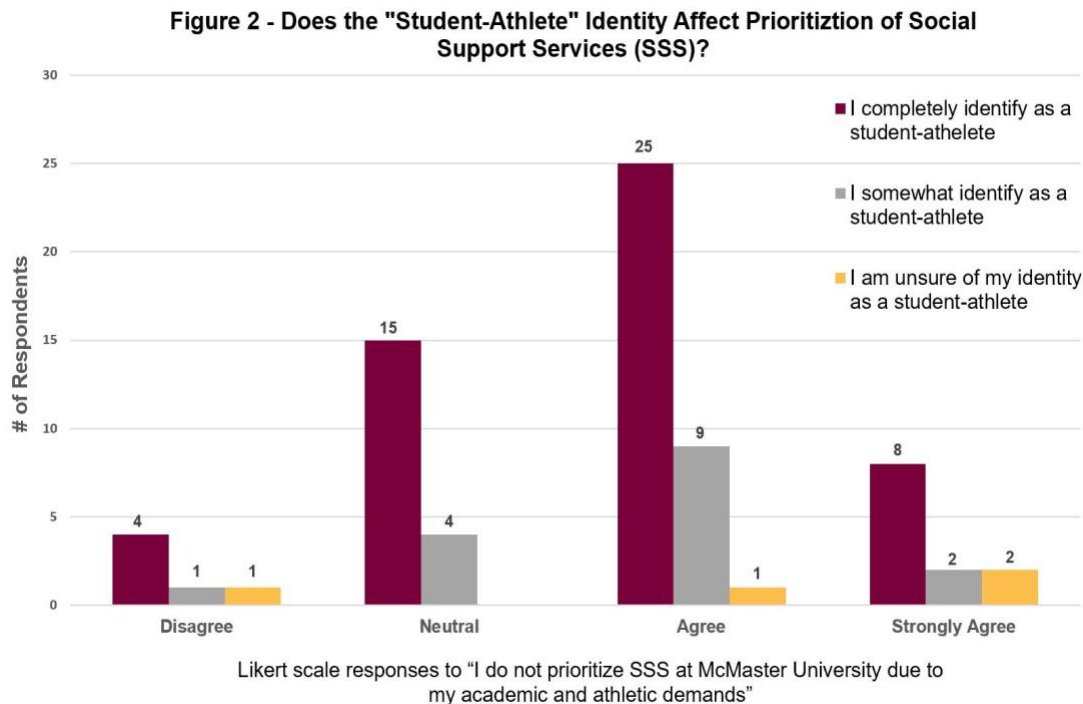
In total, 75 varsity student-athletes at McMaster University, 18 years of age and older, responded to 27 online survey questions about their perceptions of accessing social support services on campus. When asked to self-identify in terms of one's gender identity, participants identified as follows: female (n=39); male (n=35); non-binary (n=1) as depicted in Figure 1. Based on the age range of participants in our sample, 24% (n=18) were 18 years old, 21.33% (n=16) were 19 years old, 24% (n=18) were 20 years old, 18.67% (n=14) were 21 years old, 9.33% (n=9) were 22 years old, 1.33% (n=1) was 24 years old and n=1 participant chose not to answer. Our sample population of athletes

consisted of 29 (38.67%) participants only in the Ontario University Athletics (OUA), 44 (58.67%) participants in OUA and USports, and 2 (2.67%) participants belonging to neither conference. Of our sample 14 (18.67%) participants play individual sports (i.e. wrestling) and 61 (81.33%) participants play on a team (i.e. football).

Figure 1 - Student-athlete participants were asked in question 3, “How much time on average in a week do you spend with your varsity team (i.e. practice, games, travelling, etc.)?”. The results showed that 14.67% (n=11) answered “1-10 hours”, 54% (n=41) answered “11-20 hours”, and 30.67% (n=23) answered “21-30 hours”. Participants were asked in question 4 “How strongly do you identify with the level ‘student-athlete’ (i.e. being a full-time student and full-time athlete is part of your identity)?”. The response “I do not identify as a student-athlete at all” was eliminated from the graphing analysis as no participants selected it. The results showed that 73% (n=55) of participants answered, “I completely identify as a student-athlete”, 21.33% (n=16) answered “I somewhat identify as a student-athlete” and 5.33% (n=4) answered “I am unsure of my identity as a student-athlete”. Figure 1 compares questions 3 and 4, to answer the question of how time spent on sport affiliations affects Student-athlete identity salience. The findings found that student-athletes who spend 11-20 hours a week on sport affiliated activities maintain a stronger sense of identity. Majority of respondents completely identified as a student-athlete despite the number of hours spent on sports affiliations.

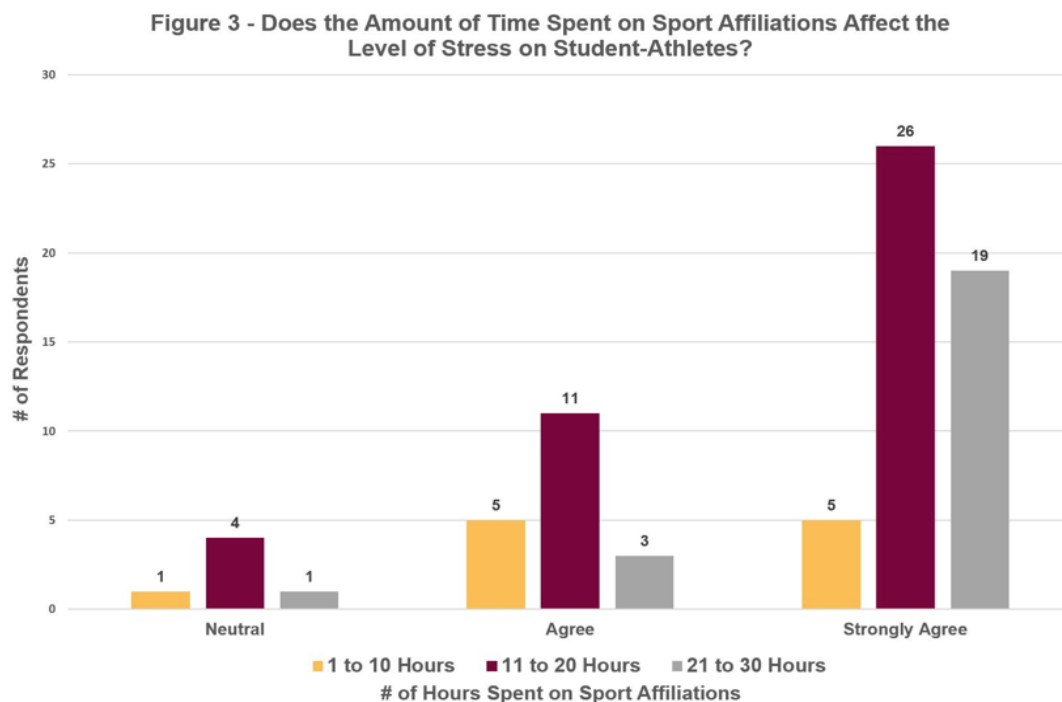
Figure 2 - Participants were asked in question 4 “How strongly do you identify with the label ‘student-athlete’” (i.e. being a full-time student and full-time athlete is part of your identity). The results showed that 73% of participants (n=55) answered, “I completely identify as a student-athlete”, 21.33% (n=16) answered “I somewhat identify as a student-athlete” and 5.33% (n=4) answered “I am unsure of my identity as a student-athlete”. The





response "I do not identify as a student-athlete at all" was eliminated from the graphing analysis as no participants selected it. In question 5 participants were asked to rate their level of agreement on a 5-point Likert scale to the prompt "I do not prioritize social support services at McMaster University due to my academic and athletic demands". The results showed that 8% (n=6) of participants responded "Disagree", 25% (n=18) participants selected "Neutral", 48% (n=36), 16% (n=12) selected "Strongly Agree", and 4% (3=n) selected the "No Answer" option. The response "strongly disagree" was not included in the graphing analysis because it was not selected by any participants. Figure 2 compares questions 4 and 5 to study if the student-Athlete identity affects prioritization of social support services. The results found that a student-athletes identity influences their prioritization of accessing social support services at McMaster. Students who completely identified as student-athletes indicated they did not prioritize social support services at McMaster due to academic and athletic demands. The results infer that increased internalization of the student-athlete identity reduces prioritization of accessing social support services at McMaster University.

Figure 3 - Student-athlete participants were asked in question 3 "How much time on average in a week do you spend with your varsity team (i.e. practice, games, travelling, etc.)?". The results showed that 14.67% (n=11) answered "1-10 hours", 54% (n=41) answered "11-20 hours", and 30.67% (n=23) answered "21-30 hours". In question 7 participants were asked to rate their level of agreement on a 5-point Likert scale with the statement "Students who participate on varsity teams have an added stress to their daily lives". The result showed 8% (n=6) of participants selected "Neutral", 25.33% (n=19) selected "Agree", 65.33% (n=49) selected "Strongly Agree", and 1.33% (n=1) selected "No answer". "Strong Disagree" and "Disagree" were eliminated from the graphing

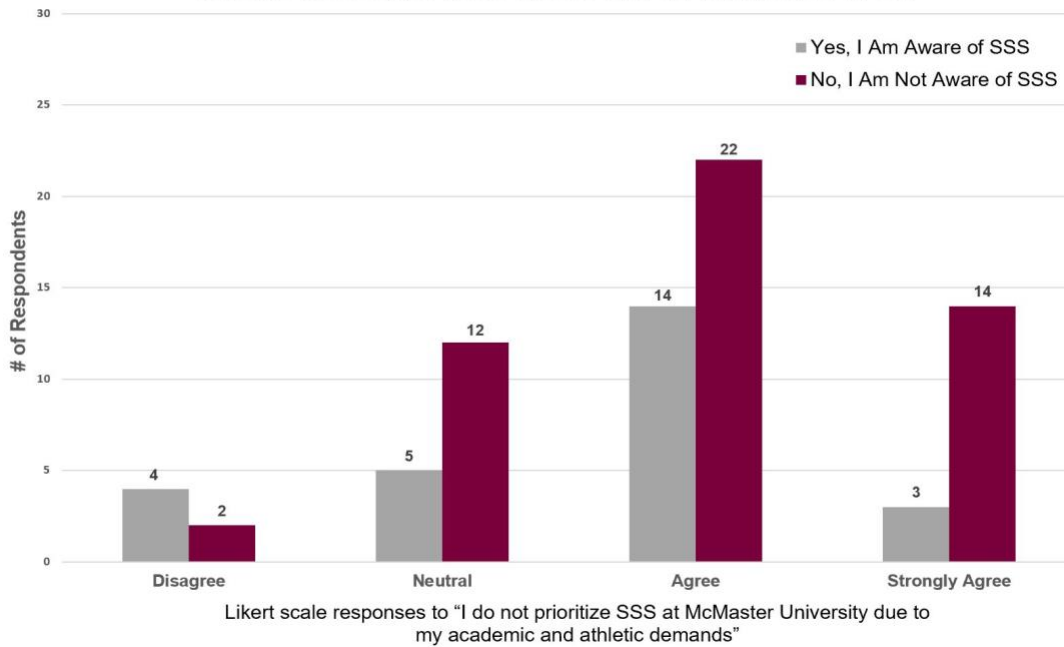


analysis as they were not selected by participants. Figure 3 compares questions 3 and 7 to examine if the amount of time spent on a sport affiliation affects the level of stress on student-athletes. From the results, all respondents stated that there was some added stress to their well-being since none of the participants selected neither disagreement options. The majority of respondents “agreed” or “strongly agreed” that the number of hours spent on sport affiliations impacts their stress levels. Student-athletes who spent about 11-20 hours experienced the highest levels of stress compared to students-athletes participating in their sport for 1-10 hours. This indicates a connection between hours spent on sport affiliation and elevated stress levels.

Figure 4 - Student-athlete participants were asked question 5 which prompts “I do not prioritize social support services at McMaster University due to my academic and athletic demands”. The participants were to answer the question based on their level of agreement via a 5-point Likert scale. The results showed that 8% (n=6) of participants responded “Disagree”, 25% (n=18) participants selected “Neutral”, 48% (n=36) participants selected “agree,” 16% (n=12) selected “Strongly Agree”, and 4% (3=n) selected the “No Answer” option. The response “strongly disagree” was not included in the graph analysis because it was not selected by any participants.

In question 9 participants were asked, “Are you aware of the social support services available to you as a student-athlete on campus?”. The results showed that 36% (n=27) of participants answered “Yes”, 62.67 (47%) of respondents answered “No”, and 1.33% (n=1) selected “No answer”. Figure 4 compares questions 5 and 9 to determine if the level of awareness of social support services by student-athletes has effects on the level of prioritization of social support services. The results indicated that over half of the respondents stated they were not aware of social support services on campus. Many participants also “agreed” or “strongly agreed” that they did not prioritize social support services when responding to the statement “I do not prioritize social support services at

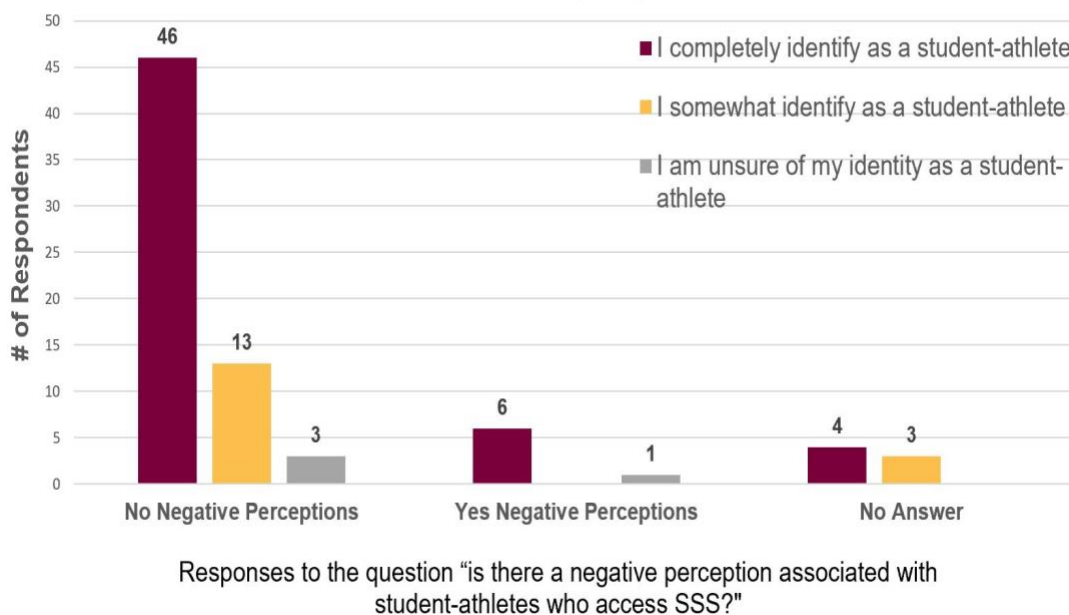
**Figure 4 - The Level of Awareness of Social Support Services (SSS) by Student-Athletes has Effects on the Level of Prioritizations of SSS**



McMaster University due to academic and athletic demands". These results infer that awareness does impact prioritization, suggesting that there is not enough information about the social support services available to student-athletes.

Figure 5 - Participants were asked in question 4, "How strongly do you identify with the level 'student-athlete' (i.e. being a full-time student and full-time athlete is part of your identity)?". The results showed that 73% (n=55) of participants answered, "I completely

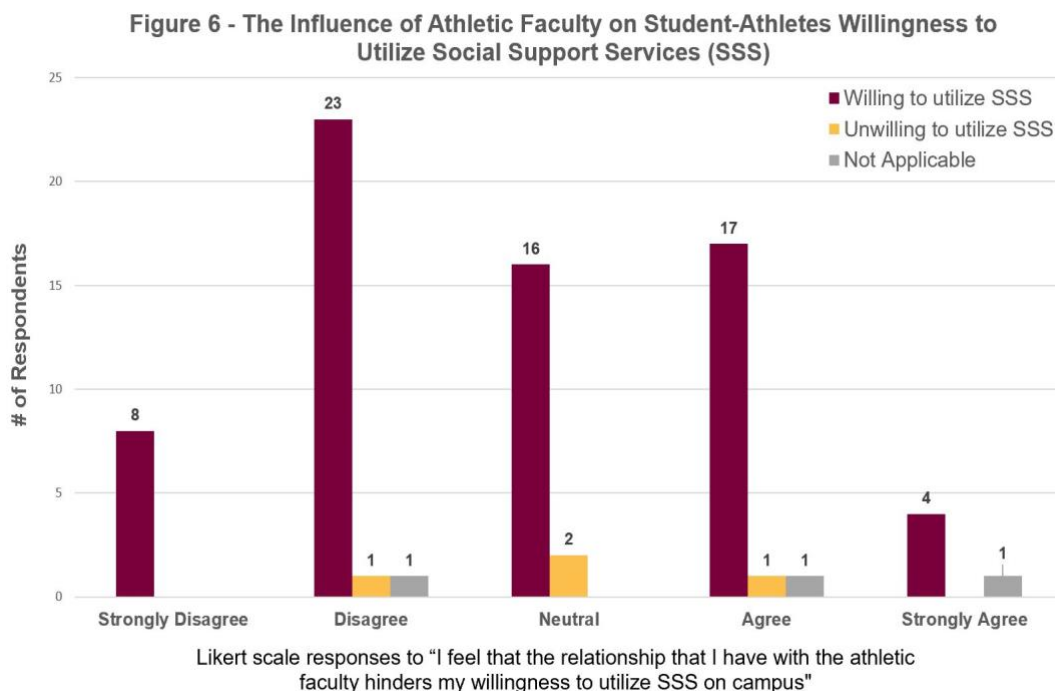
**Figure 5 - Student-Athlete Perception on Utilizing Social Support Services (SSS)**



identify as a student-athlete”, 21.33% (n=16) answered “I somewhat identify as a student-athlete” and 5.33% (n=4) answered “I am unsure of my identity as a student-athlete”. The response “I do not identify as a student-athlete at all” was eliminated from the graphing analysis as no participants selected it. Participants were asked for question 12, “Is there a negative perception associated with student-athletes who access social support services?”. The results showed 9.33% (n=7) of participants answered “Yes”, 82.67% (n=62) of participants answered “No”, and 8% (n=6). Figure 5 compares questions 4 and 12 to examine if there are any negative perceptions of identity if student-athletes utilize social support services. The results found that student-athletes who “completely identify as a student-athlete” accounted for the majority of the “No negative perceptions” respondents. These results indicate that “student-athlete identity” does not have an effect on negative perceptions around accessing social support services.

Figure 6 - Student-athlete participants were asked in question 13 to rate their level of agreement on a 5-point Likert scale to the prompt “Hypothetically speaking, do you think that one’s relationship with the athletic faculty (i.e. coaches, trainers, teammates) hinders their willingness to utilize social support services on campus?”. The results found that 10.67% (n=8) of participants selected “Strongly Disagree”, 33.33% (n=25) selected “Disagree”, 24% (n=18) selected “Neutral”, 25.33% (n=19) selected “Agree”, and 6.67% (n=5) selected “Strongly Agree”.

In question 14 participants were asked “Hypothetically speaking, would you be more willing to seek help if recommended by a coach or teammate?”. The results showed that 90.67% (n=68) of participants answered “Yes”, 5.33% (n=4) answered “No”, 2.67% (n=2) answered “Not Applicable”, and 1.33% (n=1) selected “No answer”. Figure 6 compared questions 13 and 14 to examine if the athletic faculty had an influence on student-athletes’ willingness to utilize social support services. Participants who had a high willingness to utilize social support services had a variation on how they felt about the athletic faculty’s influence. 24% (n=18) of participants remained “Neutral” on the influence





of athletic faculty, while 32% (n=24) of respondents agreed that their relationship with the athletic faculty hinders their willingness to utilize social support services on campus. However, 44% (n=33) of respondents were also in disagreement with that statement.

## Discussion

### Relationship to Faculty

The relationship between student-athletes and their athletic faculty is important when discussing the utilization of social support services. Athletic faculty includes but is not limited to; coaches, teammates, trainers and other relevant staff that athlete's may come into contact with throughout their season. In our study just under half, 44% (n=33), of our participants felt that hypothetically, their relationship with athletic faculty does not affect their willingness to utilize social support services at McMaster University. This suggests that athletic faculty have minimal bearings on an athlete's use of social support services. This is in contradiction to what was found in other studies and literature reviews where it was commonly found that the relationship student-athletes have to faculty is very influential in their well-being (Leimer et al., 2014; Ryan et al., 2018; Hawley et al., 2014). The contradictions found could be due to the small sample size collected and participants' concern related to what faculty would say looking at these results. It should also be noted that 32% (n=24) of participants said that their relationship does hinder their willingness to utilize social support services, which could be due to various factors such as social environment, communication and availability of resources. The remaining participants 24% (n=18), felt neutral about the statement and were neither here nor there. These findings will be explored in depth by looking at specific relationships such as the ones formed via the athlete and coach, athlete and team, and the athlete and other athletic professionals.

The question to follow, sought to find out whether participants would be more willing to seek help if recommended by a coach or teammate, to which 90.67% (n=68) of respondents answered yes. This suggests that if encouraged or guided by outside sources, student-athletes would be more inclined to utilize social support services. In analyzing these results, we can see a clear contradiction with the above statement, "hypothetically speaking, one's relationship with athletic faculty does not affect their willingness to utilize social support services at McMaster University" as these results suggest that encouragement does affect one's willingness. Therefore, it can be assumed that positive reinforcement and conversations in the normalization of mental unwellness encourages student-athletes to seek help when needed. As stated by Wahto et al. (2016, p. 88), "willingness to seek help would be the highest when the referral came directly from a coach or teammate compared to oneself or a family member". Various other studies have found that the relationship between a student-athlete and their coaches and teammates significantly impacts their views on the use of social support services (Leimer et al., 2014; Hawley et al. 2014).

The relationship between a student-athlete and their coach is indicative of their willingness to seek help when needed. Coaches can play an active role in encouraging and caring for their team's mental health according to NCAA research (Ryan et al., 2018). Using a socio-ecological framework, the social environment enacted by coaches influences their players and the team domain as a whole (Moreland et al., 2018). This can either emphasize or minimize the value placed on mental health and the steps taken to



provide for support or treatment when needed (Ryan et al., 2018). Coaches are in a position of power and can influence how mental health is discussed within the parameters of the team. In understanding mental health and burnout, a study found that student-athlete's resilience was correlated with two types of social support, including informational support and tangible social support (Lu et al., 2016). Informational support includes "advice and guidance; such as helping athletes deal with slumps and set-backs, failures, problems of training and competitions, and enhance athlete fitness" (Lu et al., 2016, p. 207). Tangible support is the hands-on approach offered by coaches, where they are made aware of the resources and services available to them (Lu et al., 2016). This is correlated to our findings about the importance and need for awareness regarding social support services available on McMaster campus discussed in the awareness section below.

These findings speak to the facilitators and barriers of seeking social support services as mentioned in the literature review. Coaches' reaction and understanding of mental health issues deliberately affects students seeking social support (Ryan, 2018). This can act as a barrier as student-athletes fear a negative reaction resulting in personal discomfort, lack of compassion, or losing their coaches confidence in them (Ryan et al., 2018; Leimer et al., 2014; Hawley et al. 2014). In order for coaches and teammates to act as facilitators to social support services, there is a need for open communication and positive attitudes surrounding the topic (Gulliver et al., 2012). This notion is further explored in the sections regarding identity salience and perceptions.

Focusing on student-athletes and their relationship to their teammates, studies show how loyalty and winning ideologies can influence social support seeking behaviours. (Leimer et al., 2014). There is a common "Win-At-All Costs" philosophy experienced by student-athletes that prioritize winning and needs of the team over oneself (Leimer et al., 2014). This philosophy would suggest that student-athletes have been socialized to do what is best for the team over what is best for themselves (Leimer et al., 2014). Student-athletes who contemplate reaching out for help were found to be thinking about what that would suggest about their ability to perform (Leimer et al., 2014; Kern et al., 2017). These feelings are directly correlated to fear of stigma and negative perceptions that may exist among student-athletes.

Beyond coaches and teammates, student-athletes interact with trainers and specialists throughout their designated season. Trainers and specialists are another form of gatekeepers that can control the social environment's student-athletes exist in (Gulliver et al., 2012; Levy & Lopez, 2013). These relationships can also influence a student-athlete's perception on using social support services and whether or not it will affect their identity as an athlete. The stigma that exists within these communities can affect the type of treatment and plans of actions student-athletes are put through. "It has been reported that stigma often deters professionals working with the athletes from referring an athlete to a mental health professional" (Gulliver et al., 2012, p. 3). This is concerning for student-athletes as their gatekeepers control their social environment and those that they have access to. If professionals are not granting access or facilitating social support services, then they are acting as a barrier to the help student-athletes are seeking.

Overall, it is evident that a student-athlete's relationship with athletic faculty does play a role in whether or not they utilize social support services. With positive reinforcement, our study and previous studies found that there is an increased willingness to seek social

support. Which suggests a need for open and honest communication about mental health concerns in student-athletes' lives.

### **Awareness**

Throughout our study, a common theme of importance was awareness. Many sociological researchers have noted that there is a lack of awareness amongst varsity student-athletes when it comes to mental well-being and the social support services available to them (Kern et al., 2017). Kern et al. (2017) state that there is a need for the creation of interventions that formulate awareness and make mental health a norm of a student-athletes health status overall. Breeding awareness of mental wellness would aid in the normalization of help-seeking amongst varsity student-athletes (Kern et al., 2017). It is not uncommon for student-athletes to feel a sense of fear surrounding stigma and lack knowledge when looking to access social support services (Ryan et al., 2018). This notion was furthered by our own findings, which indicated that 85.33% (n=64) of student-athletes at McMaster University believe McMaster's athletic department could improve on their awareness promotion of social support services. As researchers, this is something we would hope our study could help formulate a solution.

Another interesting finding is that the majority of student-athletes who were already aware of social support services were made aware by their friends. 62.67% (n=47) of student-athletes were uncertain of what social support services were available to them at the University, with only 32% (n=27) being aware. This further alludes to the fact that within the athletic department itself, there is a lack of awareness. If the department was ensuring that students were sufficiently aware of the resources available to them, these students would not need the guidance of a peer. However, it can also be said that it is a positive trait that friends are communicating helpful resources to those athletes. We know that student-athletes face more mental stressors than non-student-athletes, so it is imperative that these athletes are aware of who, what, and where they could get the appropriate help needed (Ryan et al., 2018).

Rickwood, Cavanagh, Curtis, and Sakrouge (2004) have made suggestions about incorporating the involvement of athletes who have dealt with mental health struggles as well as specialized sport psychologists during information sessions with student-athletes. This would aid in the awareness of the matter through the familiar nature of those presenting the information (Kern et al., 2017). Their role would be to separate the facts from myths when it came to mental wellness as their research has shown improvement with this method (Kern et al., 2017). Currently, McMaster University varsity athletes do not feel that the David Braley Athletic Centre does a good enough job of promoting information for the accessing of social support services. When asked if the participants felt that there was enough promotion of social support services, 30.67% (n=23) disagreed that they did, with about 22.67% (n=17) agreeing that there was.

However, the same amount of people that disagreed with there being a good job done on promotion were neutral in their feelings. This shows us that not enough athletes are confident in their awareness of social support aids. More of them gave us disagreement and uncertainty than those that gave positive appraisals. Furthermore, we wanted to gauge which social support services the athletes were most aware of. The findings indicated that 86.67% (n=65) of students were aware of the Student Wellness Centre, 46.67% (n=35) were aware of Student Accessibility Services, 50.67% (n=38) were aware

of the Student Success Centre, 12% (n=9) were aware of the Student Health Education Centre and only a shocking 32% (n=24) were aware of the Counselling services offered. Granted, the numbers for the wellness center are not too catastrophic, however, the others are very worrying as to why all athletes should have 100% awareness. Knowing that student-athletes need such services, possibly more than non-student-athletes, this is very problematic and needs to be remedied. Furthermore, about 85% of participants overall stated that McMaster as a school needed to do a better job of promoting these imperative services. Further investigation is needed to determine what services are predominately accessed and used by student-athletes and therefore promoted accurately.

Previous studies by the NCAA (2016) tell us that awareness is imperative to the furthering of help-seeking behaviours of student-athletes, however, we are noting a clear lack within our findings. This indicates that McMaster University and the David Braley Athletic Centre specifically need to shift the current method of information-giving when it comes to mental wellness amongst varsity student-athletes. Not enough student-athletes are benefiting from these needed services. There needs to be a normalization and an incorporation of that akin to the student-athlete lived experience to make more of an impact and increase help-seeking behaviours amongst these athletes (Kern et al., 2017).

### **Specialized Services**

Through the analysis of our results, we have discovered that there is a need for sports-based social services within the McMaster athletic faculty, specifically at the varsity level. Student-athletes are constantly under stress due to heavy athletic and academic demands and unfortunately, time is not an asset (Wahto et al., 2016). Research suggests that due to the enormous demand and psychological distress that is placed upon student-athletes, research suggests that “10-25% of college student-athletes suffer from psychological distress at a level indicative of a need for psychological services” (Wahto et al., 2016, p. 86). Our findings show that 85.34% (n= 64) of McMaster student-athlete participants responded that they spend an average of 11-30 hours per week on sport affiliations alone (that does not account for the time spent on academic work). As a result, 90.66% (n= 68) of McMaster student-athletes have agreed that they have added stress to their daily lives simply by being a part of a varsity team. The limits on time served as a crucial barrier to utilizing social support services as it “highlights the importance of making these services available to student-athletes in light of their demanding schedules” (Levy & Lopez, 2013, p. 25).

The National Collegiate Athletic Association (NCAA) “Mental Health Best Practices” document notes that a student-athlete’s well-being is “best served through a collaborative process in which the mental health provider is easily accessible and within or proximate to athletic department facilities” (Sudano et al., 2017, p. 78). Additionally, Sudano et al. (2017) have suggested that “one way to provide comprehensive care to student-athletes is using an integrated care model. Integrated care combines mental and medical health services to form a unified, on-site team, integrated treatments, systems, and payments” (p. 78). Currently, 64% (n= 48) of McMaster student-athletes do not prioritize social support services due to their academic and athletic demands which could hinder their performance in their respective sport. 81.33% (n= 61) of McMaster student-athlete participants selected that athletic stressors account for the most negative impacts on their

daily lives. This is an indication to place potential treatments inside the David Braley Athletic Centre but must emphasize that “if services are provided to student-athletes within the athletic department, services must be provided in a location that protects the student-athlete’s privacy and confidentiality from other athletes and staff” (Levy & Lopez, 2013, p. 28). This privatization could possibly ensure that the athletes are not held back from seeking help due to any form of stigma.

A highlight of our research findings indicates that McMaster student-athletes need better access to social support services regarding more flexible time schedules, shorter wait times, extra support during midterms and exams season, and spreading awareness more consistently. In a study conducted in the United States, it asked, “what conditions would increase student-athlete access to mental health care?”, and the top three responses were; free services, access to a practitioner with an understanding of the student-athlete experience, and the ability to schedule appointments online (Ryan et al., 2018, p. 73). In addition, 90.67% (n= 68) of McMaster student-athlete participants have expressed that they would be willing to seek help if recommended by a coach or teammate. This is in accordance with past studies that suggest familiarity to the field makes an individual more appealing to the athlete.

Generally, student-athletes feel “that anonymous access to the internet may act as a facilitator for a small minority of athletes who may not feel comfortable approaching a health provider in person” (Gulliver et al., 2012, p. 9). Research suggests that the “head Athletic Certified Trainers” (ATC) are often aware of the mental health issues in the student-athlete population, which is important because the ATC’s are often the first line of triage for an athlete with mental illness” (Sudano & Miles, 2017, p. 266). Additionally, ATC’s and student-athletes spend a significant amount of time together, therefore it is emphasized that it is very crucial that the open lines of communication are maintained (Sudano & Miles, 2017). Moreover, there are currently “no recommendations for the amount of time a mental health clinician should be available, therefore it is crucial that a student-athlete has regular access to a member of the health care team in case of an emotional crisis” (Sudano & Miles, 2017, p. 266).

In general, student-athletes demonstrate more negative attitudes toward help-seeking behavior in comparison to their non-athlete peers (Ryan et al., 2018, p. 73; Wahto et al., 2016). Our research displays that McMaster student-athletes would prefer more specialized social support services that are tailored to understanding their athletic demands, such as a Sports Psychologist. Gulliver et al. (2012) conducted a research study and found that “male college athletes’ attitudes demonstrated that negatively assessed male athletes who consulted a ‘psychotherapist’ but not consulting a ‘sport psychologist’ felt that it was due to their misunderstanding of the sport” (Gulliver et al., 2012, p. 2). The differentiation of attitude could be a result of “the latter being more involved in performance enhancement than mental health issues” (Gulliver et al., 2012, p. 2). Furthermore, the male athlete participants were more “comfortable seeing sport psychologists for performance related issues”, such as performance enhancement instead of mental health counseling (Ryan et al., 2018, p. 73). Similarly, student-athletes expressed that they are more willing to seek help when the program is targeted toward a sports culture (Gulliver et al., 2012). However, though it is clear from the aforementioned that specialized services are more preferred, the normalization of mental health in athletic spheres is still needed.

Not only does talking to a sport psychologist make it more comfortable for student-athletes, but also the age of the psychologist matters. Our findings of McMaster student-athletes highlighted that they prefer having sport psychologists who were once student-athletes themselves. That finding was common across other research studies as it was expressed that participants prefer a “counsellor knowledgeable and personally experienced with sports, possibly with collegiate sports participation” (Levy & Lopez, 2013, p. 29). However, athletes also state that they would prefer seeking treatment from individuals “who are older than they are, but still close enough in age to understand their journey as college-age students” (Levy & Lopez, 2013, p. 27). The reason is that “participants held perceptions believing that they would not be understood” which acted as a barrier to seeking such services. Similarly, our results indicate student-athletes prefer help providers who potentially will understand the athlete’s complex role and “sport-related issues” and “not have to explain their complex day-to-day existences or the intricacies of their sport, but to be free to focus on the issue troubling them” (Levy & Lopez, 2013, p. 27). That being said, student-athletes also felt that having a good rapport with a health professional would be a factor to push them in the direction of seeking help when needed (Levy & Lopez, 2013). Overwhelmingly, they thought that knowing the psychologists they would be accessing made it “easier if you need help” (Ryan et al., 2018, p. 9). Thus, as showcased, familiarity with sport is an asset to student-athletes.

### **Identity Salience**

The findings within this theme came with a contradiction. We hypothesized that the more a student-athlete identified with their student-athlete label, the more likely they were to regress from help-seeking behaviors. We based this hypothesis on previous studies dealing with the presentation of self and the ideal of the strong stoic student-athlete. Previous studies would conclude that our hypothesis was indeed correct. Dean (2019) and Leimer et al. (2014) stated that student-athletes held a strong stoic ideal that made them perceive help-seeking as weak due to a no pain, no gain ideology. The walk-it-off mentality is a norm of being on a sports-affiliated team (Dean, 2019). However, our findings indicated that even though the majority of students identified their student-athlete title as their master status, 76% (n=57) of them did not feel that their strong or stoic image prevented them from seeking social support services. This finding was furthered by the fact that over 80% of participants stated that they did not believe that there was a negative perception associated with student-athletes who accessed social support services. Referencing Hughes (1971) master status, one’s social identity often aligns with their social environments and thus influences their behaviour in front of others. Thus, the athletic social world student-athletes exist in places a very critical eye on their behaviour and needs for social support services.

The fact still stood that they were not accessing them at a rate that correlated with their responses. Over 60% of the students were not even aware of the services to access them, and about half of them stated they did not prioritize social support services due in part to their focus on their athletic status. This beckons us as researchers to ask, if their athletic identity was not stopping McMaster University student-athletes from accessing social support services, then what was? Was there bias in their answers due to not wanting to be perceived in a negative light somehow? Or is it that at McMaster University

they perceive the support services as a positive thing but still do not act on it due to fear of perceived stigma? Lastly, was our sample size simply too small?

We know that “previous research that has examined barriers to athletes seeking psychological help has suggested that although student-athletes view coaches and teammates as major sources of support, they also view these individuals as barriers to seeking professional psychological help” (Wahto et al., 2016, p. 87). Thus, why then were our findings not a parallel? Regardless of the reasoning, it stood that our findings did not support our original line of thinking. Sheehan et al. (2018) tell us that the lifestyle of a student-athlete in its dualism as an academic participant as well, puts them at risk for aggressive moods, depression, anxiety and inability to sleep. The aforementioned further their chances of drug and alcohol abuse as well (Dean, 2019). With such knowledge, there is a need to mobilize student-athletes into more help-seeking behaviours to ensure that they get help where it is needed.

### **Athletic & Academic Demand**

From the survey results we found that academic and athletic stressors were the highest-ranked stresses that McMaster student-athletes experienced. However, these results are not surprising, as past research done by Hilliard et al. (2018) expressed that student-athletes are a vulnerable population as they continue to balance academic and sport-performance pressures, along with injury and interpersonal relationships. Similarly, Gulliver et al. (2012, p. 5) comment that commitments to both their sport and studying were sources of stress. Based on one of our Likert scale questions in the survey which stated, “I do not prioritize social support services at McMaster University due to my academic and athletic demands”, we found that 48% of McMaster student-athlete participants agreed, and 16% strongly agreed with the statement. Therefore, the well-being of student-athletes has been restricted due to their physical health, further influencing their performance outcomes in sports and academics (Watson & Kissinger, 2017, p. 153).

### ***Types of Demands***

Through our research, we can infer that student-athletes experience more demands than non-students-athletes. For instance, student-athletes are restricted to social and occupational opportunities due to their intense sport scheduling and time constraints (Gavrilova & Donohue, 2018). By limiting their time socially and academically, a student-athlete has less time to reflect on themselves and their well-being. The types of commitments student-athletes participate in includes physical sport training, maintaining multiple relationships within or outside of the team, restricted financial opportunity and avoiding injury (Gavrilova & Donohue, 2018). In addition, maintaining their fitness for better performance is equally important (Gavrilova & Donohue, 2018), since monitoring their nutrition, body composition and coping with physical fatigue is often unavoidable (Van Slingerland et al., 2018). Noticeably, there is an overwhelming amount of commitments for student-athletes to maintain. As a result, these types of demands that student-athlete’s experience may affect them academically, emotionally, and personally (Van Slingerland et al., 2018).

### **Pressures Experienced Based on Demands**

The athletic and academic demands that student-athletes experience may cause additional pressures. For example, Wahto et al. (2016) study estimates that approximately 10% to 25% of college student-athletes suffer from psychological distress. Therefore, this level of distress may indicate that there is an increased chance of student-athletes experiencing psychological health problems (Kern et al., 2017). The increased demands on their academic and athletic careers greatly impact the pressures and stress added to a student-athletes' well-being. Student-athletes are often expected to maintain an acceptable grade point average (GPA) throughout the year while also taking on their athletic demands. Failure to do so can result in loss of playing time, loss of scholarships, risk of damaging relationships with teammates (Moore, 2017, p. 133). However, with the pressures to perform at an elite level in their respective sport, coaches, families, or even student-athletes themselves create an additional pressure in fear of causing disappointment for the coaching staff and their informal support network (Moore, 2017; Gulliver et al., 2012, p. 4). Also, one of the reasons why student-athletes do not seek social support services was due to their lack of time (Gulliver et al., 2012, p. 3; Levy & Lopez, 2013, p. 25).

According to our survey respondents, their ability to seek services was limited and the services were not made available during the times that a student-athlete was available. As a result, student-athletes would rather prioritize the pressures coming from their sport since there is less time to put towards seeking social support services.

### **Perception**

The main finding from the results in perceptions was, student-athletes did not feel there was a negative perception of athletes who access social support services. In response to "Do you believe that the strong stoic ideal of a student-athlete is compromised if an athlete accesses social support services at McMaster?", 76% (n=57) respondents answered "No", and only 16% (n=12) answered "Yes". However, this finding is contradictory to the previous literature on student-athletes' perceptions. According to other research done, the stigma around help-seeking is why student-athletes have low help-seeking rates. Kern et al. (2017) found that student-athletes encounter barriers to help-seeking due to stigma surrounding mental illness and the use of mental health services. In this study, student-athletes were found to have more negative perceptions of help-seeking behaviours when compared to non-athletes (Kern et al., 2017).

Wahto et al. (2016) found that stigma was a predictor of negative attitudes that were associated with student-athletes lack of utilization of services. As well, Ryan et al. (2018) found student-athletes fear negative reactions from coaches and administration, along with personal discomfort, further creating barriers to seeking mental health treatment. There is also evidence to support that all students, athlete and non-athlete, underutilize mental health resources due to the associated stigma (Wahto et al., 2016; Watson, 2005). The particular mental health concerns of student-athletes were found to be mostly depression and anxiety (Tomalski et al., 2019). Student-athletes also have perceptions of stigma around having a mental health concern, not just seeking out help for it (Tomalski et al., 2019). There are also findings, in particular, that male and younger athletes have been reported to have fewer positive attitudes towards seeing a sport psychologist than female and older athletes (Martin et al., 2004; Gulliver et al., 2012). A more specific

example of the perceived stigma around help-seeking behaviours, student-athletes were found to have perceptions that they will be thought of as weak (Levy & Lopez, 2013; Watson, 2005; Gulliver et al., 2012). As well, student-athletes reported high levels of motivation that was found to contribute to their perception of maintaining high standards of success (Levy & Lopez, 2013; Gulliver et al., 2012). Student-athletes being highly concerned with the perceptions of others is also problematic as they are more likely to be recognized on campus accessing counselling centres than their non-athlete peers (Levy & Lopez, 2013). In summary of all these findings, the perceptions and norms of athletics in combination with the social and cultural environment of a university impacts how athletes perceive mental health and help-seeking behaviours (Moreland et al., 2018).

A possible explanation of our research's contradictory finding to an abundance of research, is hesitation to disclose any negative perception student-athletes may hold. As highlighted in Goffman (1959), the respondents may have felt they had to uphold their front-stage self even on an anonymous survey. As well, Kaier et al. (2015) found that student-athletes have a greater perceived public stigma than personal stigma. This suggests that student-athletes could be internalizing personal stigma and prejudices. According to Levy & Lopez (2013), there could be an unwritten code of athletics that student-athletes perceive has never shown "weakness" even to themselves to avoid any negative perceptions of performance. Both of these findings could also translate while answering a survey, especially one that highlights athletic identity. There is also the possibility that student-athletes feel comfortable enough at this university to be open about their help-seeking behaviours of social support services. Further research would need to be done on this student-athlete population to conclude the reasoning.

## **Stress**

Based on our group's results, it is evident that most student-athletes felt they had added stress to their daily lives. Of the participants 65.33% (n=49) strongly agreed that stress is involved in their daily lives when managing an academic workload as well as participating in a varsity sport at McMaster. With such strict demands and limited time constraints, student-athletes are often restricted to social and occupational opportunities due to their intense sport scheduling and time constraints (Gavrilova & Donohue, 2018). Stress is inevitable when it comes to playing competitive sports, and the chronic stress that athletes experience is harmful and could lead to burn out (Lu et al., 2016). As a result, student-athletes experience multiple forms of stressors. Through our study, we were able to verify that a student-athlete's stress levels can be affected both physically and mentally.

## **Types of Stressors**

It is evident through previous studies and our findings that stress has always been a prevalent factor affecting student-athletes. The majority of our respondents agreed 25.33% (n=19) or strongly agreed 65.33% (n=49) that student-athletes on varsity teams have an added stress. Ryan et al. (2018) found that student-athletes have an elevated risk of distress due to the variety of environmental and developmental factors they encounter throughout the school year. In comparison to our study, participants agreed that the stressors they experience could either be personal, academic or athletic, or more than just one. Student-athletes possess stressors such as increased academic pressures,



longer playing seasons, pressure from coaches to win, the commercialization of college athletics, and living away from their families which all are a source of stress that impacts the mental health of student-athletes (Ryan et al., 2018; Gulliver et al., 2012, p. 5). One respondent in our survey commented that midterm and exam season is one of the most stressful times and would appreciate heightened promotion of social support services during these times. Consequently, student-athletes endure additional stressors due to the demands of their dual-status throughout the school year (Kern et al., 2017).

### **Stress & Mental Health**

As a consequence of the added stress that student-athletes experience, there is a greater effect on their mental health. Since the Van Slingerland et al. (2018) study focused on the levels and prevalence of mental health functioning in Canadian university student-athletes, they found that the “time of year, individual living arrangements, substance usage, year of study were all found to have an effect on student-athlete’s mental health” (Van Slingerland et al., 2018, p.150). Therefore, student-athletes were found to have differences in mental health compared to non-athletes during their athletic season (Sheehan et al., 2018).

Results from our study also suggested that the majority of student-athletes felt that there was more stress in some academic years versus others. For instance, 98.67% (n=74) of participants agreed that they tend to experience more stress in some academic years versus others; 66.67% (n=50) agreed that first year was the most stressful meanwhile 41.33% (n=31) believed fourth year was the most stressful year. If a student-athlete is not receiving adequate help for their mental health during a peak year, it can impact them negatively. One respondent in our study suggested that the people currently working in the social support services may not fully understand the type of commitments and extra stress that student-athletes undergo, therefore, hindering the ability or willingness for student-athletes to reach out for help.

Due to student-athletes not receiving the right type of social support for their particular stressors, mental health issues that are found to potentially arise are disturbed moods, depression and anxiety, and insomnia (Sheehan et al., 2018). To add, Gulliver et al. (2012, p. 4) study found that there were participants that felt depressed or anxious when they had a poor sports performance or had feelings of depression, sadness, and anger due to experiencing a short or long-term injury. Issues such as weight gain and/or maintenance were critical to the student-athlete’s ability to perform which was an additional source of stress (Gulliver et al., 2012). Overall, it is important to monitor the mental health of student-athletes because of the high risk associated with strict athletic demands, thus limiting their time to access social services on campus.

### **Future Implications**

Awareness is a key factor that was discovered in our findings, as 85.33% (n= 64) of McMaster student-athlete participants stated that there was a need for improvement surrounding the promotion of social support services within the McMaster University Athletic Department. It is extremely important for athletic departments to “foster an environment supportive of seeking help for issues of mental health and well-being” (Levy & Lopez, 2013, p. 28). Of McMaster student-athlete participants, 62.67% (n= 47) stated that they are unaware of the social support services that are available at McMaster. In

addition, our open-ended question results emphasized that McMaster's Athletic Department needs to improve on posting more information of support that is available throughout the David Braley Athletic Centre to increase the overall awareness. It was also stressed that resources need to be distributed equally to all McMaster teams and not only making a few teams the top priority. As previously mentioned, Van Slingerland et al., (2018), recognized the importance of the "work needed to normalize the conversation of mental health struggles and treatment in student-athletes" (p. 162).

The researchers also suggested that post-secondary institutions "consider mental health screening as part of their pre-season examinations" (Van Slingerland et al., 2018, p. 162). Furthermore, family members may have little knowledge of their student-athletes' experience of "mental health problems or need for psychological help" as in most cases student-athletes leave home to attend school (Wahto et al., 2016, p. 95). It was revealed in our survey responses that 86.67% (n= 65) of McMaster student-athletes currently live in on-campus residences or in nearby student-houses. It would be of benefit for McMaster Athletic Department to conduct a presentation that informs first year students of the social support services offered, as 66.67% (n= 50) of participants addressed that first year indeed places the most stress on McMaster student-athletes.

Communication plays a major role in ending the stigma in the athletic community, it may be of interest to the McMaster Athletic Department to organize presentations to specific sports individually. It could be a McMaster Alumni of the sport that has utilized social support services in the past. The goal of the presentation is to share their story to provide a sense of acceptance and overall, more awareness for student-athletes. 73.33% (n= 55) of McMaster student-athletes believe that McMaster University, as a whole, can improve on the social support services offered on campus. By developing a relationship with the Student Wellness Centre, "athletic departments may facilitate the implementation of counseling services that are tailored to meet the unique time demands and providers with sports knowledge so as to enhance the counseling experiences of student-athletes" (Levy & Lopez, 2013, p. 28). By developing a relationship, significant increases could occur "in knowledge and positive attitudes toward mental health and help-seeking.

These results suggest that brief contact-and education-based interventions may be helpful in reducing stigma and promoting help-seeking behavior among college student-athletes" (Kern et al., 2017, p. 324). Athletic departments would benefit from "recruiting and hiring staff members who are aware of the importance of attending to student-athletes' mental health and well-being and are outwardly and positively supportive of seeking help when it is desired or necessary" (Levy & Lopez, 2013, p. 28). In addition, knowing more about the levels of stigma that student-athletes face compared to non-athletes could help identify an appropriate intervention for the student-athlete population (Hilliard et al., 2018). In general, an Athletic Department's main goal is to "send out a message of acceptance, support, and promotion of mental wellness that may be conveyed to their student-athletes. In addition, to open lines of communication between the student-athletes and coaching staff" (Wahto et al., 2016, p. 95).

### **Limitations**

Although our anonymous online survey did not present any ethical issues to our participants, we faced certain limitations which hindered our ability to collect more appropriate data. One of our main limitations in the survey was the wording of our

questions. For example, one of our survey questions was, “With what ethnicity do you identify?”, and from this we noticed that the participants did not completely understand the term “ethnicity”. The question was not clear to the participants if we were talking about race, country of origin, background or skin colour. Furthermore, aside from many participants correctly identifying as Caucasian as an answer for ethnicity, other participants stated that they were White or multicultural. Therefore, if we had defined the term ethnicity, we would have been able to better quantify each ethnic identity that participated in our survey.

Another question that had provided us with limitations is Question 15 and 16 which asked, “In general, do you believe students tend to experience more stress in some academic years versus others?”. The follow up question if the participant answered yes was, “If yes to the previous question, which academic school year(s) do you believe places the most stress on students? Select all that apply”. From these two questions, the participants may have interpreted the question as to which year they anticipate to be the most stressful rather than which year they experienced as the most stressful. Rather than asking what the student-athletes would have thought as the most stressful academic year, we should have asked out of which years they have experienced, which one was the most stressful.

Based on our sample size of 75 McMaster student-athlete participants, we were content with the collection of data that we have received. However, the student-athlete population at McMaster is immense. If we had recruited more participants for our survey, this could have changed the results of our data significantly since we would have more insight from a greater amount of the student-athlete population inducing generalizability. We also recognize that there was a difference among student-athletes in terms of competition level which could have affected their answers since resources are allocated differently. This should be further explored in future studies.

A final limitation we experienced was the use of language. We were not able to ask certain questions that explicitly stated mental health and or acts of help-seeking due to psychological risks that might occur. For example, one question we would have wanted to ask was regarding “have you previously accessed social support services?”. In asking this, we would have wanted to evaluate how often the social support services were actually being used by student-athletes. Instead, we focused on whether student-athletes were aware of social support services in general and how they were informed of these services.

### **Insights**

Our survey questions have allowed us to identify some major issues that needed to be discussed with respect to mental health within the McMaster athletic community. The data that we have collected through our participants has enabled us to provide feedback to McMaster’s athletic community to improve the awareness of social support services available to student-athletes. One of the main insights we received from participants was that there needs to be an improvement in awareness, accessibility and flexibility of social support service appointments. McMaster as a whole should better in providing accessible resources that fit around the intense schedule student-athletes endure. The athletic department should focus on personal recommendations by coaching staff or teammates

and increase in the number of sports psychologists available to assist student-athletes in both physical and mental well-being.

### Conclusion

Based on our results, we can conclude that McMaster varsity student-athletes do not hold a negative perception towards accessing social support services on campus. However, we did find that there is a lack of awareness for the social support services available for student-athletes. Although there are interventions already in place at McMaster University for the entire student population, not enough awareness is delivered around campus. In particular, there are not enough posters and information boards displayed for student-athletes in the David Braley Athletic Centre.

Overall, we did see some restrictions throughout the implementation of our study as above-mentioned. However, we found that our findings still gave great insight into student-athletes in relation to the accessing of social support services. Even within the contradictions we found, we were able to further analyze what those contradictions insinuated. We definitely see the need to implement more awareness-promotion to normalize mental health in the athletic sphere. Specialized services are also a key point of notation as we cannot ignore the fact that athletes lean towards those of familiar backgrounds. With implementation of such interventions, we hope to see improvements such as the ones seen within the NCAA studies mentioned prior. As much as society thrives on the benefits within the realm of sport culture, we cannot neglect the backstage of such culture. With this in mind, we as researchers believe that our study can provide aid in regard to this due to its inclusion of successful interventions.

### Acknowledgments

We would like to thank all survey participants as this project would not have been possible without them. A special thank you to Dr. Sarah Clancy who was the group thesis supervisor of our capstone project, the McMaster Research Ethics Board, DASH Resources, the different social services offered on campus, and to everyone on our team of researchers for the time and effort put into bringing this study to a successful conclusion.

### References

- Bathje, G. & Marston, H. (2014). Self-stigmatization. *Encyclopedia of Critical Psychology*, 1687-1920. DOI 10.1007/978-1-4614-5583-7. Retrieved from [https://link.springer.com/referenceworkentry/10.007%2F978-1-4614-5583-7\\_395](https://link.springer.com/referenceworkentry/10.007%2F978-1-4614-5583-7_395)
- Becker, Howard. S. (1963). *Outsiders*. London: Free Press.
- Bird, M. & Chow, G. (2018). Student-athlete and student non-athletes' stigma and attitudes towards seeking online and face-to-face counseling. *Journal of Clinical Sport Psychology*, 12, 347–364. Retrieved on October 03, [https://www.researchgate.net/publication/324735810\\_StudentAthlete\\_and\\_Student\\_NoAthletes'\\_Stigma\\_and\\_Attitudes\\_Toward\\_Seeking\\_Online\\_and\\_Face-to-Face\\_Counseling\[1\]](https://www.researchgate.net/publication/324735810_StudentAthlete_and_Student_NoAthletes'_Stigma_and_Attitudes_Toward_Seeking_Online_and_Face-to-Face_Counseling[1])
- Dean, N. A. (2019). "Just Act Normal": Concussion and the (Re)negotiation of Athletic Identity, *Sociology of Sport Journal*, 36(1), 22-31. Retrieved Oct 03, 2019, from <https://journals.humankinetics.com/view/journals/ssj/36/1/article-p22.xml>

- Egan, K. P. (2019). Supporting Mental Health and Well-being Among Student-Athletes. *Clinics in Sports Medicine*, 38(4), 537–544. doi: 10.1016/j.csm.2019.05.003. From [https://www.sportsmed.theclinics.com/article/S0278-5919\(19\)30041-9/abstract](https://www.sportsmed.theclinics.com/article/S0278-5919(19)30041-9/abstract)
- Gavrilova, Y., & Donohue, B. (2018). Sport-Specific Mental Health Interventions in Athletes: A Call for Optimization Models Sensitive to Sport Culture. *Journal of Sport Behavior*, 41(3), 283–304. Retrieved from [https://www.researchgate.net/profile/Yulia\\_Gavrilova2/publication/320567736\\_Sport-Specific\\_Mental\\_Health\\_Interventions\\_in\\_Athletes\\_A\\_Call\\_for\\_Optimization\\_Models\\_Sensitive\\_to\\_Sport\\_Culture/links/5c167e284585157ac1c7b0bf/Sport-Specific-Mental-Health-Interventions-in-Athletes-A-Call-for-Optimization-Models-Sensitive-to-Sport-Culture.pdf](https://www.researchgate.net/profile/Yulia_Gavrilova2/publication/320567736_Sport-Specific_Mental_Health_Interventions_in_Athletes_A_Call_for_Optimization_Models_Sensitive_to_Sport_Culture/links/5c167e284585157ac1c7b0bf/Sport-Specific-Mental-Health-Interventions-in-Athletes-A-Call-for-Optimization-Models-Sensitive-to-Sport-Culture.pdf)
- Goffman, E. (1956). *The Presentation of Self in Everyday Life*. Edinburgh: Univ. of Edinburgh.
- Gulliver, A., Griffiths, K.M, & Christensen, H. (2012). Barriers and facilitators to mental health help-seeking for young elite athletes: a qualitative study. *BMC psychiatry*, 12(157), 1-14. Retrieved from <http://www.biomedcentral.com/1471-244X/12/157>
- Hawley, L. R., Hosch, H. M., & Bovaird, J. A. (2014). Exploring social identity theory and the 'black sheep effect' among college student-athletes and non-athletes. *Journal of Sport Behavior*, 37(1), 56+. Retrieved from <https://web.a.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authType=crawler&jrnl=01627341&AN=110738049&h=aEOXL0jqxTVnGRd8%2fbqbxpTYuc9%2f%2bXvCVYWc50N1C7JvIAF91HVAoXrRslqMIHWnrPDYX4K0cFKm8gxNcfwF5A%3d%3d&crl=c&resultNs=AdminWebAuth&resultLocal=ErrCrlNotAuth&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authType%3dcrawler%26jrnl%3d01627341%26AN%3d110738049>
- Hilliard, R. C., Redmond, L. A., & Watson, J. C. (2018). Differences in Stigma and Attitudes Toward Counseling Between College Student-Athletes and Nonathletes. *Journal of College Student Psychotherapy*, 33(4), 332–339. Doi:10.1080/87568225.2018.1504639. Retrieved from [https://www.tandfonline.com/doi/full/10.1080/87568225.2018.1504639?casa\\_tok`en=htdBTSdytsAAAAA%3AePhqIS7cotzoYFtTn1CZrfs\\_1yrdvhNHliUbxUOsBJGB8ZmG369f1KaeZjVeA7JTmBDLj7LrpWg](https://www.tandfonline.com/doi/full/10.1080/87568225.2018.1504639?casa_tok`en=htdBTSdytsAAAAA%3AePhqIS7cotzoYFtTn1CZrfs_1yrdvhNHliUbxUOsBJGB8ZmG369f1KaeZjVeA7JTmBDLj7LrpWg)
- Hughes, Everett, C. (1971). *The Sociological Eye - Selected Papers*. Chicago, IL: Aldine Atherton.
- Kaier, E., Cromer, L.D., Johnson, M.D., Strunk, K., & Davis, J.L. (2015). Perceptions of Mental Illness Stigma: Comparisons of Athletes to Nonathlete Peers. *Journal of College Student Development* 56(7), 735-739. doi:10.1353/csd.2015.0079. Retrieved from <https://muse.jhu.edu/article/597271>
- Kern, A., Heining, W., Klueh, E., Salazar, S., Hansen, B., Meyer, T., & Eisenberg, D. (2017). Athletes Connected: Results From a Pilot Project to Address Knowledge and Attitudes About Mental Health Among College Student-Athletes. *Journal of Clinical Sport Psychology*, 11(4), 324. Retrieved from <https://journals.humankinetics.com/view/journals/jcsp/11/4/article-p324.xml>
- Leimer, A., Leon, R., Shelley, K., (2014). Stigmas and Stereotypes: Counseling Services for Student-Athletes. *Journal for the Study of Sports and Athletes*

- in Education*, 8 (29), 121-135. Retrieved from [https://www.tandfonline.com/doi/full/10.1179/1935739714Z.00000000022?casa\\_token=roiwmvBI9lwAAAAA%3A\\_EsUF8eNUtBikv9X0L6g5\\_CCi88I4u1ovTkLEIEuVFYbQylwsALfWAr5mEw1PDT7DcgYXbptw\\_FLA](https://www.tandfonline.com/doi/full/10.1179/1935739714Z.00000000022?casa_token=roiwmvBI9lwAAAAA%3A_EsUF8eNUtBikv9X0L6g5_CCi88I4u1ovTkLEIEuVFYbQylwsALfWAr5mEw1PDT7DcgYXbptw_FLA)
- López, R. L., & Levy, J. J. (2013). Student Athletes Perceived Barriers to and Preferences for Seeking Counseling. *Journal of College Counseling*, 16(1), 19–31. doi:10.1002/j.21611882.2013.00024.x. Retrieved from [https://onlinelibrary.wiley.com/doi/full/10.1002/j.2161-1882.2013.00024.x?casa\\_token=8PnBNj5\\_epEAAAAA%3AxH4sZG29E\\_Zeh2rKCxNtf5BYoU\\_Muxa\\_Y\\_Y613XCkWRXSHbiXqUrpW4iyJo1gq1mRgeDWFFA4xEBOUq](https://onlinelibrary.wiley.com/doi/full/10.1002/j.2161-1882.2013.00024.x?casa_token=8PnBNj5_epEAAAAA%3AxH4sZG29E_Zeh2rKCxNtf5BYoU_Muxa_Y_Y613XCkWRXSHbiXqUrpW4iyJo1gq1mRgeDWFFA4xEBOUq)
- Lu, F. J., Lee, W. P., Chang, Y.-K., Chou, C.-C., Hsu, Y.-W., Lin, J.-H., & Gill, D. L. (2016). Interaction of athletes resilience and coaches social support on the stress-burnout relationship: A conjunctive moderation perspective. *Psychology of Sport and Exercise*, 22, 202–209. doi: 10.1016/j.psychsport.2015.08.005. Retrieved from [https://www.sciencedirect.com/science/article/pii/S1469029215300029?casa\\_token=8zCxL5RsK38AAAAA:Knp3nKISHBrbcFKr2OMMnRglHHH63ZxW4EY0Dww16NkQ6CtpXVIKNZF\\_6gcpuE7IKnmgWrXWjw](https://www.sciencedirect.com/science/article/pii/S1469029215300029?casa_token=8zCxL5RsK38AAAAA:Knp3nKISHBrbcFKr2OMMnRglHHH63ZxW4EY0Dww16NkQ6CtpXVIKNZF_6gcpuE7IKnmgWrXWjw)
- Moore, M. (2017). Stepping Outside of their Comfort Zone: Perceptions of Seeking Behavioral Health Services amongst College Athletes. *Journal of Issues in Intercollegiate Athletics*, 130-144. Retrieved October 03, from [http://csri-jiia.org/wp-content/uploads/2017/07/JIIA\\_2017\\_SI\\_08.pdf](http://csri-jiia.org/wp-content/uploads/2017/07/JIIA_2017_SI_08.pdf)
- Moreland, J. J., Coxe, K. A., & Yang, J. (2018). Collegiate athletes' mental health services utilization: A systematic review of conceptualizations, operationalizations, facilitators, and barriers. *Journal of Sport and Health Science*, 7(1), 58-69. doi:10.1016/j.jshs.2017.04.009. Retrieved from <https://www.sciencedirect.com/science/article/pii/S2095254617300637>
- Ryan, H., Gayles, J. G., & Bell, L. (2018). Student-Athletes and mental health experiences. *New Directions for Student Services*, 2018(163), 67-79. doi:10.1002/ss.20271. Retrieved from [https://onlinelibrary.wiley.com/doi/full/10.1002/SS.20271?casa\\_token=OxhotMCh\\_F08AAAAA%3A3Vvq4voaUDG-bYpImgnTzE40Wvw3IZIj5mBV4cM-9ca4TCsMy4Xy3yuUL\\_frZxNlvLAUcJx1jL4mUN0](https://onlinelibrary.wiley.com/doi/full/10.1002/SS.20271?casa_token=OxhotMCh_F08AAAAA%3A3Vvq4voaUDG-bYpImgnTzE40Wvw3IZIj5mBV4cM-9ca4TCsMy4Xy3yuUL_frZxNlvLAUcJx1jL4mUN0)
- Sheehan, R. B., Herring, M. P., & Campbell, M. J. (2018). Longitudinal relations of mental health and motivation among elite student-athletes across a condensed season: Plausible influence of academic and athletic schedule. *Psychology of Sport and Exercise*, 37, 146-152. doi:10.1016/j.psychsport.2018.03.0005. Retrieved from [https://www.sciencedirect.com/science/article/pii/S1469029217306556?casa\\_token=Wcng4NTZXFkAAAAA:bOsz\\_a8VISicHhiVd-AFP6jm4blgkGOuTtpAso1o0JqejrnuRiU4rMK8XOW0XPPGTHWQoXCim4](https://www.sciencedirect.com/science/article/pii/S1469029217306556?casa_token=Wcng4NTZXFkAAAAA:bOsz_a8VISicHhiVd-AFP6jm4blgkGOuTtpAso1o0JqejrnuRiU4rMK8XOW0XPPGTHWQoXCim4)
- Sudano, L. E., & Miles, C. M. (2017). Mental health services in NCAA Division I athletics: A survey of head ATCs. *Sports Health: A Multidisciplinary Approach*, 9(3), 262-267. doi:10.1177/1941738116679127. Retrieved from [https://journals.sagepub.com/doi/full/10.1177/1941738116679127?casa\\_token=rD2I7mncUlsAAAAA%3AxS8DAdFPTwhxklnzPs7\\_X4dL0Wk06enS3T2pZUMnTXA8TUfmgS2KyXcG6YDcekuZKsQBBgLLieKM5Q](https://journals.sagepub.com/doi/full/10.1177/1941738116679127?casa_token=rD2I7mncUlsAAAAA%3AxS8DAdFPTwhxklnzPs7_X4dL0Wk06enS3T2pZUMnTXA8TUfmgS2KyXcG6YDcekuZKsQBBgLLieKM5Q)

- Sudano, L. E., Collins, G., Miles, C. M. (2017). Reducing barriers to mental health care for student-athletes: An integrated care model. *Families, Systems, & Health*, 35(1), 77-84. doi:10.1037/fsh0000242. Retrieved from <https://psycnet.apa.org/record/2016-56887-001>
- Tomalski, J., Clevinger, K., Albert, E., Jackson, R., Wartalowicz, K., & Petrie, T. A. (2019). Mental health screening for athletes: Program development, implementation, and evaluation. *Journal of Sport Psychology in Action*, 10(2), 121-135. doi:10.1080/21520704.2019.1604589. Retrieved from [https://www.tandfonline.com/doi/full/10.1080/21520704.2019.1604589?casa\\_token=7DCQZ7rXOx0AAAAA%3AODmeB1FfNA9NUPOTb2tlkP4b2C3Dbjckt\\_cuypEm9Og2KBUt3rt7g1Up16KQTtRzzOUvuE-EASQV9A](https://www.tandfonline.com/doi/full/10.1080/21520704.2019.1604589?casa_token=7DCQZ7rXOx0AAAAA%3AODmeB1FfNA9NUPOTb2tlkP4b2C3Dbjckt_cuypEm9Og2KBUt3rt7g1Up16KQTtRzzOUvuE-EASQV9A)
- Van Slingerland, K., Durand-Bush, N. & Rathwell, S. (2018). Levels and Prevalence of Mental Health Functioning in Canadian University Student-Athletes. *Canadian Journal of Higher Education*, 48(2), 149–168. Retrieved from <https://id.erudit.org/iderudit/1057108ar>
- Wahto, R. S., Swift, J. K., & Whipple, J. L. (2016). The Role of Stigma and Referral Source in Predicting College Student-Athletes' Attitudes Toward Psychological Help-Seeking, *Journal of Clinical Sport Psychology*, 10(2), 85-98. Retrieved Oct 03, 2019, from <https://journals.humankinetics.com/view/journals/jcsp/10/2/article-p85.xml> [2]
- Watson, J. & Kissinger, D. (2007). Athletic participation and wellness: Implications for counseling College student-athletes. *Journal of college counseling*, 10, 153-162. Retrieved from October 10, from <https://onlinelibrary.wiley.com/doi/abs/10.1002/j.2161-1882.2007.tb00015.x>