# The Intersection of University Athletics and Mental Health: A Canadian Perspective

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Abstract: Existing research indicates that Canadian student-athletes experience mental health disorders at higher rates than the general student population. However, while the mental health of American student-athletes has been extensively researched, there is limited literature available about the mental health of Canadian student-athletes. Very little is also known about the stressors associated with participating in Canadian university athletics and how these stressors differ from the US experience. Using a narrative approach, this study identifies the stressors that negatively impact the mental health of Canadian student-athletes. Fourteen student-athletes were interviewed, from a range of varsity sports (individual and team) at Canadian universities, who self-identified as having a mental health issue. Participants emphasized facing significant pressures to perform while also struggling to balance their various roles and prioritize academic outcomes. Athletic injury was also identified as a significant factor contributing to negative mental health in Canadian student-athletes. Highlighting the commonalities with American literature while also highlighting the unique experience of university sports in Canada is imperative. In doing so, how to best provide mental health services and minimize barriers to accessing support within the Canadian context might be better understood.

**Keywords:** mental health, qualitative research, social science, sports, student-athletes

Résumé: D'après les recherches, un plus fort taux d'étudiants-athlètes canadiens éprouvent des troubles de santé mentale que la population générale d'étudiants. Si la santé mentale des étudiantsathlètes américains a fait l'objet de vastes recherches, les publications sur la santé mentale des étudiants-athlètes canadiens sont limitées. On sait très peu de choses sur les éléments stressants associés à la participation aux sports universitaires canadiens et sur les différences de ces éléments par rapport à ceux de l'expérience américaine. Au moyen d'une approche narrative, la présente étude relève les éléments stressants qui nuisent à la santé mentale des étudiants-athlètes canadiens. Les auteurs ont interviewé quatorze étudiants-athlètes de divers sports universitaires (individuels et en équipe) inscrits à des universités canadiennes qui ont indiqué avoir un problème de santé mentale. Les participants ont souligné qu'ils subissaient d'importantes pressions de performer en plus d'éprouver de la difficulté à équilibrer leurs divers rôles et à prioriser leurs résultats scolaires. Les blessures sportives constituaient également un facteur important qui contribuait à une mauvaise santé mentale chez les étudiants-athlètes canadiens. Il est impératif de souligner les points communs avec les publications américaines tout en faisant ressortir l'expérience unique des sports universitaires au Canada. Ce faisant, on comprendra peut-être mieux comment mieux offrir des services de santé mentale et limiter les obstacles au soutien dans un contexte canadien.

Mots clés: étudiants-athlètes, recherche qualitative, santé mentale, science sociale, sports

## Introduction

In recent years, collegiate athletics has experienced exponential growth in popularity and social relevance. Student-athletes are elite-level athletes who hold the title of "amateur" while maintaining a professional athlete's schedule and athletic standard, with the expectation of maintaining a strong academic level to meet the governing body's eligibility (Van Slingerland et al. 2019). This population represents a distinctly identifiable group of students where athletic participation offers unique privileges but distinct challenges (Van Slingerland, Durand-Bush, and Rathwell 2018). These challenges may cause collegiate athletes to be more susceptible to psychological distress (Ryan, Gaston Gayles, and Bell 2018). Student-athletes in both the United States and Canada face high academic and athletic demands, injuries, increased pressures, and stress from the transition to university and dedicating a minimum of 20 hours per week to athletic competition and practices (Gayles 2009; Rao and Hong 2020; Yang et al. 2007). These pressures on student-athletes may have profound implications on their mental health.

Currently, the severe implications of mental health problems on individuals, culture, and health care have become an undeniable reality and a pressing area of discussion nationwide. Mental health conditions are now being diagnosed at higher rates, with depression now seen as the leading cause of years lived with disability, affecting approximately 121 million people worldwide (Friedrich 2017; Yang et al. 2007). While rates of mental health conditions in younger populations continue to increase, a growing area of interest for mental health research is student-athletes. According to Sudano and Miles (2016), up to 20 percent of American student-athletes will experience symptoms of depression while demonstrating higher levels of behavioural issues and substance abuse compared to the general student population.

While most literature on student-athlete mental health is focused on athletes in the United States, the experience of Canadian athletes is of growing interest. In the Canadian context, student-athletes reported considerably higher levels of adverse mental health than the general population (Sullivan et al. 2019). The root cause for the difference in student-athletes with adverse mental health between the United States and Canada is unclear. However, in both countries, similar stressors are reported to cause student-athletes to experience adverse mental health at a higher rate than the general population (Blacker et al. 2017; Sudano and Miles 2016). Despite the higher rates of adverse mental health among the student-athlete population, very few psychiatrists, psychologists or psychotherapists have a specialty in sports in Canada (Van Slingerland et al. 2019).

I argue that Canadian university sports offer a student-athlete experience that differs from the US experience while posing culturally unique challenges. Students at Canadian universities are vulnerable to mental distress, and this must be examined holistically to understand the nuanced context of the Canadian experience. This article examines the mental health stressors found among Canadian student-athletes and the ways in which they are similar and different from their US counterparts, which are so predominant in the literature.

# Mental Health and the Student-Athlete Population

The focal points in the literature are the rates at which student-athletes experience mental health symptoms and disorders and how often these concerns are reported. Conditions such as depression, anxiety, and mood-related concerns are the most cited mental health disorders within the student-athlete population (Jewett, Kerr, and Tamminen 2018). An analysis of National Collegiate Athletic Association athletes identified that 19–25% of athletes met the symptomatic criteria for a clinical depression diagnosis (Souter, Serrant, and Lewis 2018). These disorders are reported to occur at comparable or higher rates than their non-athlete counterparts (Bird, Chow, and Cooper 2018; Magier et al. 2022). Depression is the highest-reported mental health disorder among student-athletes and university students alike (Cox 2015; Gulliver et al. 2015; Rao and Hong 2020; Souter, Lewis, and Serrant 2018; Wolanin et al. 2016; Yang et al. 2007).

Furthermore, mood disorders are higher in athletic populations due to the higher rates of injury, stress, and loss of athletic identity (Delenardo and Terrion 2014; Rao and Hong 2020). Current research shows a clear presence of depression, anxiety, and addiction disorders in student-athletes (Gorczynski, Coyle, and Gibson 2017). A further consideration of these mental health stressors is the overlap of time spent as a student-athlete and the typical age of mental illness diagnoses. Approximately one in five individuals between the ages of 18 and 25 experience a mental health disorder, with 75% of lifetime mental disorders occurring before the age of 25 (Brown 2018; Ryan, Gayles, and Bell 2018). The comparable rates of mental health disorders and symptoms with the general university population signify that athletic status is not a protective factor for mental illness or poor mental health (Ryan, Gayles, and Bell 2018).

Health care professionals and the public have a widespread belief that there is a low prevalence of psychiatric disorders and adverse mental health among elite athletes (Bär and Markser 2013). Such assumptions come from idolizing athletes, who are seen as embodying the image of ideal health and performance. Elite athletes are celebrated for demonstrating toughness and mental strength, performing under pressure, and playing through pain and injury, which has become normalized (Delenardo and Terrion 2014). Unrealistic expectations of toughness have created a problematic and dangerous environment for athletes since their livelihood is tied to their performance and reputation. Any deviation from these expectations could be detrimental to their career. As a result, the risk of experiencing adverse mental health increases, the likelihood of injury increases, and the avoidance of help-seeking is more prevalent due to a fear of public stigma (Delenardo and

Terrion 2014). Hong and Rao (2020) explain how athletic culture often labels athletes with mental illness as weak or inadequate, stigmatizing those who struggle with these conditions. This contradicts sport culture's emphasis on resilience, toughness, and winning at any cost. In most facets of culture and society, mental illness is stigmatized, with many athletes struggling with poor mental health in silence.

Mental health disorders are common in the student-athlete population, yet the culture of athletics often ignores and fails to recognize mental health concerns as a significant issue (Rao and Hong 2020). College athletes face internal and external demands to perform well in all aspects of the student-athlete experience and struggle with aspects of their evolving identity (Mast and Gentile 2019). While there is increased visibility of adverse mental health and mental illness in elite athletes, the problem remains overlooked and unresolved (Uphill, Sly, and Swain 2016). Despite a series of high-profile breakdowns and athlete suicides, sports officials and governing bodies overlook the significance of psychiatric symptoms in athletes (Hughes and Leavey 2012).

Collegiate athletics are an integral part of most university campuses in North America, attracting prospective students and creating enormous revenue. While providing extensive social benefits, collegiate athletics offers educational opportunities to individuals from various backgrounds and delivers elite athletic competition. However, in the United States, the evolving nature of college sports continues to shift toward a prominent business model, moving further away from the educational mission and purpose of the institutions the athletes attend (Bowen and Levin 2003; Jayakumar and Comeaux 2016; Knight Commission of Intercollegiate Athletics 2010).

Given the physical and psychological demands placed on student-athletes, this demographic may be more predisposed to depressive symptoms and mental health problems compared to their non-athlete peers (Crocker, Chard, and Duncan 2021; Mast and Gentile 2019; Souter, Lewis, and Serrant 2018; Uphill, Sly, and Swain 2016). General life stressors, including relationship breakdown, health concerns, and grief, are experienced at comparable rates to university students. However, the vulnerability to adverse mental health is built around the identity of the "athlete" (Souter, Lewis, and Serrant 2018). Increased fame or elevated personal status and enormous external pressures to perform are all sports-specific factors that impact athletes. The university sports season is comparable to working a full-time job, with vast amounts of time dedicated to playing games, practicing, working out, watching film, and recovering. In their limited free time, athletes are expected to complete their academic work, maintain a social life, explore career advancement, and maintain personal relationships. Such extensive personal commitments and expectations can cause increased stress levels in athletes, putting them at risk physically and mentally (Reardon et al. 2019).

Additional risk factors for mental health disorders extend past the demanding lifestyle of varsity athletics. Sports-specific risk factors can often cause significant psychological

stress and serious mental health concerns. Athletic injury, surgery, and career termination can often be the most critical risk factor for elite-level athletes (Reardon et al. 2019). In sports, injuries have been a health focus for athletes, coaches, and medical staff, emphasizing the recovery and treatment of the players' physical problems. However, this focus often overlooks the psychological distress faced during injury and the destructive impact that involuntary removal from competition has emotionally, psychologically, and psychically in all aspects of athletes' lives.

Much of the existing research has focused on prevalence rates and risk factors for student-athlete mental health, highlighting and emphasizing the scope of the problem and possible contributing factors and stressors. Less attention has been paid to the individual experiences of navigating these stressors, how student-athletes make sense of their own experience, and which parts of the student-athlete experience they attribute to their mental health struggles. Furthermore, most extant research has been conducted in the US context. While these findings certainly have some relevance to the Canadian context, the Canadian student-athlete experience introduces a number of unique and important considerations. For example, Canadian student-athletes receive fewer scholarship opportunities, smaller financial scholarships, and little to no media coverage (Crocker and Duncan 2020; Miller and Kerr 2002). Yet common factors, including injury, poor sporting performance, internal and external pressures, academic dissatisfaction, and academic performance, are reported concerns for student-athletes. However, there are overlooked complicated psychological and social experiences that shape how individuals respond to situations (Gorczynski, Coyle, and Gibson 2017). Important factors such as negative childhood experiences, upbringing, cultural diversity, socio-cultural roles, and religion play enormous roles in response to specific stressors associated with the daily experience of a student-athlete (Gorczynski, Coyle, and Gibson 2017). The complexity of student-athlete mental health is far more profound than the commonly reported risk factors and stressors related to varsity athletics.

Despite the known stressors for student-athlete mental health, why student-athletes experience adverse mental health remains unclear. As such, this study used a narrative approach to examine student-athletes on a humanistic level, using storytelling to unveil the experience of adverse mental health on a personal level. Furthermore, this study seeks to develop an understanding of how the roles associated with being a student-athlete can be a source of psychological distress and identify which stressors are most significant to the individual and how they make sense of them with respect to who they are or can be as part of their student-athlete story. While existing literature examines the rates at which athletes experience adverse mental health, a narrative approach aims to build on these findings to explore the underlying causes. In doing so, a deep dive into the potential causes of student-athlete mental health problems provides insights into how student-athletes experience university and their mental health. This information would help inform and improve funded resources in Canadian university athletics.

## Methods

This article outlines the factors that impact the mental health of Canadian student-athletes through a narrative approach while comparing the experiences of the participant student-athletes to the common factors identified in the existing literature on the topic. The following research questions drove the study: (I) Are there unique factors impacting the mental health of student-athletes in the Canadian university context that are currently missing from the existing literature? and (2) Are Canadian student-athletes' experiences similar to the reported experiences from the United States? To address these research questions, narrative inquiry is presented as an effective research method that delves into people's experiences through storytelling. Through this approach, we can gain a more profound understanding of individuals' experiences by exploring them in detail. Narrative inquiry serves as both a perspective on people's experiences and a methodology for examining them thoroughly. By examining these experiences deeply, we can better understand the circumstances surrounding the story and study them on a more intimate level (Clandinin and Caine 2008; Smith and Sparkes 2012).

This study is informed by narrative identity theory, a perspective commonly used to understand how people make sense of their lives and their changing identities (McAdams, Shiner, and Tacket 2019). Storytelling and narrative-based research play a crucial role in the evolution of an individual's identity, particularly for individuals who have dealt with life-changing events (McAdams, Shiner, and Tacket 2019). Stories of physical or mental illness can be crucial to understanding the situational details of illness while locating the shifts in the individual's sense of identity. Episodes of poor mental health or mental illness can dramatically shift an individual's sense of self or change their perspective on their life story. Thus, narrative identity theory serves as a practical perspective to examine how student-athletes make sense of their experiences with poor mental health and the stressors they attribute to these experiences.

# **Data Collection**

As an author, my athletic background and positioning are relevant in the context of this research project. Having spent 13 years participating in an elite amateur and professional level of sports and an additional three years as a student-athlete, I have a deep connection and understanding of the themes explored in this article. These experiences and "insider" perspectives on athletic culture have become central to my research and shaped the methodological approach, interview questions, and how the data are analyzed.

Utilizing my athletic connections, participants were recruited through email outreach to athletic departments and student-athletes who have previously expressed interest in student-athlete mental health through interviews and awareness programs. The recruitment process began with three student-athletes from two Canadian universities. An

additional II student-athletes from five Canadian universities were later recruited based on recommendations from the initial participants. The participant pool was comprised of eight female student-athletes and six male student-athletes from a variety of Canadian university sports. These sports include track-and-field, cross-country, soccer, rugby, volley-ball, and baseball. Upon selection, the participants were provided with a letter of information outlining the project and screened to meet the guidelines outlined by the university research ethics board. To be eligible for this study, participants were required to be a Canadian university student-athlete, have self-identified mental health struggles in their time as a student-athlete, and have participated in at least one sporting season at the university level.

The data collection was completed through the online communications platform Zoom in a private and password-protected video call. Interviews were conducted by video call for 90 minutes and audio-recorded with participant consent. The interviews were semi-structured in format, using a pre-approved question list but leaving room for further investigation and interpretation by the participant. The question list examined multiple facets of the student-athlete experience to understand the athletes' mental health and the circumstances around their experiences. The preliminary inquiry was into their athletic experiences and their desires to become a student-athlete, the challenges associated with being a student-athlete, and their experiences with their mental health as a student-athlete. The latter part of the interview guide was concerned with the barriers to mental health care, their knowledge of existing services, and areas they would like to see improved.

Upon completion of the interview process, the audio recordings were transcribed and stored in individual participant files using pseudonyms. Transcriptions were analyzed using narrative analysis, examining the individual narratives to understand the differences between participants in their unique contexts (Floersch et al. 2010; Simons et al. 2008; Zelčāne and Pipere 2023). From a narrative identity perspective, the stories revealed aspects of how the participants made sense of their mental health in both their student and athletic roles and contexts. Further data exploration through thematic narrative analysis was used to identify commonalities in narratives from participant experiences, attitudes and health-seeking behaviours. As per Riessman (2007), thematic narrative analysis strongly emphasizes the "told" aspect, which refers to the content of speech concerning events and thoughts. This method prioritizes the substance of the stories rather than their organization, intending to identify shared themes between participants and develop theories around them (Ronkainen, Watkins, and Ryba 2016). Using this approach, a focus on shared experiences through narrative was appropriate while positioning each narrative in the unique context of the storyteller's identity.

Using thematic narrative analysis, three key themes were identified across the experiences of the research participants. The identified themes were compared to the reported experiences of mental health in student-athletes in the US literature to find

commonalities and differences in the Canadian context. This methodological approach draws inspiration from Crocker, Chard, and Duncan (2021). The present study employed a methodical selection process of identifying direct story excerpts from individual narratives that effectively represented the core issues of each theme. To ensure authenticity in the direct quotations from athletes, unique characters were crafted for each theme that aligned with the specific sport and varsity experience described by the athlete (Crocker, Chard, and Duncan 2021). While the identified themes represent common experiences across the participant sample, to demonstrate each theme I share several longer excerpts from one of the demonstrative participants. In this way, I am presenting an individual athlete's narrative as an exemplar of the theme in question. In doing so, I follow narrative scholars who maintain that one story, presented in-depth, allows us to preserve and present the richness and context of the narrative (Carless and Douglas 2013). This is useful for demonstrating how individual athletes make sense of the commonly experienced factors influencing their mental health.

While this study provides valuable insights into the experiences and mental health of student-athletes, certain demographic and social identifiers, such as race, ethnicity, gender, class, and early schooling experiences, were not disclosed to preserve the requested anonymity of the respondents. This approach was essential to creating a safe and confidential space for participants to share their experiences openly, particularly given the sensitive nature of mental health discussions. While this decision enhanced ethical rigor and protected participants' privacy, it limits the ability to explore how intersecting identity factors and early educational environments may have influenced their aspirations, experiences, and mental health. Future research could complement this study by incorporating these dimensions to provide a more holistic understanding of the social and cultural factors shaping the experiences of student-athletes.

## Results

The following sections provide narrative excerpts that illustrate the specific mental health stressors encountered by Canadian student-athletes as a result of their participation in university sports.

# The Pressures, Expectations, and Poor Performances

A considerable source of stress and commonly identified factor in negative participant mental health was the pressures associated with performance and participants' self-expectations. These stressors were acknowledged as a significant source of stress for all participants. However, the narrative shared by Malcolm best embodied the feelings shared by the collective. Malcolm, a Canadian university cross-country athlete, highlights how

pressure and athletic performance were the defining factors for his overall experience as a student-athlete and for his mental health:

The pressure and poor results. . . . If you are a soccer player and you are having a bad game, you can always turn it around, but you have plenty of chances to make important plays during the game, too. So, where your performance might start poorly at the beginning of the match, you can still put in the effort and be a part of decisive moments of the game where you are like there is an upward trend of your performance throughout a match. Whereas in running, your performance is quantified by a number at the very end. . . . I am incredibly impacted by the quantifiable nature of the sport. So, like, looking at myself and being represented by this time, in this distance, or this placing in this race . . . for me, it is literally a quantifiable measure of like, who I am, and what my worth is . . . it is like, oh, I ran this time, and it is not good. So I am not a good athlete.

Malcolm's experiences echo the research of Newman, Fletcher, and Howells (2016), which found that defeat or sporting failure can be damaging in many ways. Athletes often perceive athletic failure as a failure in the eyes of their teammates, coaches and fans. As outlined by Rao and Hong (2020), Malcolm emphasized that his pressure to perform was multilayered and unique to his sport, and his individual experience contributed to adverse mental health. For most, the pressures to perform are personal and tailored to the individual experience. However, increased expectations to perform at the highest level allow for more experiences of disappointment and perceived failure.

When asked to elaborate on his feelings of self-worth and how he looks after himself, Malcolm responded:

I would say that is not a priority because so much of my mental health depends on how I am performing in the sport. So, it is more of a priority to perform well, and then if I am performing well, then my mental health will just improve. And if I am not performing well, my mental health will decline.

Bertilsson et al. (2015) state that athletes' fear of failure creates a cycle where failures intensify depressive symptoms and fuel the need for success to increase self-worth and validate their existence. How Malcolm spoke about his sporting participation appeared internally conflicting. While there was a clear desire for success, it was to avoid the overwhelming feelings of failure and defeat rather than experiencing the emotion of victory. In this case, avoiding the feelings of failure preserved Malcolm's narrative identity. For Malcolm, like most, athletics had been a positive escape from reality in his earlier years. However, he explained the consequences of chasing perfection impacted his mental health:

A huge lack of confidence that would spill over into most facets of my life. It started with a lack of confidence then that sort of progressed into generally not feeling great about myself, and then that progresses into thinking that you're not where you should be or that you're basically just inferior to other people. . . . It would be sort of a bit depressing,

comparing myself to other people. But now, it's more like motivation to just work harder during workouts. Still, definitely, a comparison plays into it, just because that's the nature of being given a number at the end of a performance.

Malcolm's internal challenges are unique, but his experiences of dealing with failure are a reality for many elite-level athletes. The overall mental health of athletes hinges on the outcome of their sporting participation, opening them up to struggle in many facets, athletically, academically, and socially. A significant relationship exists then between an athlete's mental health and their performance, creating an environment that can be devastating for the athlete (Souter, Lewis, and Serrant 2018). In this environment, an unhealthy cycle is formed. When athletes perform well, they thrive athletically and this encourages success in other parts of their student-athlete experience. However, a negative performance or a loss can intensify negative emotions and negatively affect their mental health. Moreover, while the athlete is experiencing adverse mental health or depressive symptoms, further athletic performances are likely to be affected (Souter, Lewis, and Serrant 2018). The pressure to perform is also often heavily influenced by the unknown outcome of the upcoming competition for most athletes. The fear of an inadequate performance only enhances pressure so that athletes experience increased internal pressures, as well as pressure not to let down their peers. Like many athletes, Malcolm's mental health, daily experiences, and identity as a student-athlete are tied to personal performance and competitive outcomes. Although athletes crave and experience the highs of victory, the overwhelming disappointment and heartbreak of failure and defeat are inevitable.

# **Balancing Roles**

The conflicting nature of balancing roles was a focal point during interviews with all participants. The demands of collegiate sports were often identified as a burden and a primary source of stress outside athletic competition. The stress of balancing roles and the lack of time was a focal point during the interview with Phillip, a Canadian university track athlete:

I would say that, so I tried to think of them off my head, but it would be time management. Like you are always training, you are always training, you are always, you know, trying to set your day up so that you can get your workouts in, but also complete everything on time. . . . I guess an example of that I would be doing homework between reps would be like, I would be like doing like some calculations for mass balances, like between reps, like 10 minutes or so between sets, I would be doing work and like that between sets while I am like cooling down. And I think, I guess, the best way to describe it is that you have to plan every single minute. It's like you have to plan when you are sleeping; you have to plan all your meals ahead of time because you will not have the time to make your dinners and lunches and stuff like that. . . . So one thing I did when I was a student-athlete was I kind of looked at the

prompts schedules, like months in advance, to try and understand like, what, you know, what essays can I get started right now that were not due in like two months, and I could just start writing a first draft.

The concerns of the time commitment and the prioritization of athletics over academics are apparent in the personal accounts of student-athletes, like Phillip. For many, these time constraints are far too demanding, and they would sacrifice their academic performance. The internal conflict of balancing these roles calls into question Phillip's sense of agency and narrative identity. McAdams, Shiner, and Tacket (2019) explain that an individual's narrative identity is an evolving story that answers the questions of who we are and how we came to be that person. In Phillip's case, he was uncertain of who he was. Was he a student-athlete? Or, was he expected to be only an athlete? Phillip's experiences highlight the critical issues presented by Van Slingerland, Durand-Bush and Rathwell (2018), who found that the requirement to excel in academics and athletics while managing a demanding schedule opens many student-athletes up to psychological and mental health concerns. Such conditions may pose an increased risk for declining mental health and well-being compared to the non-athlete populations within the Canadian university population.

When asked to expand on the issues surrounding time constraints and time management, Phillip brought to light the conflicting nature of balancing the roles of athlete and student:

Just to add to that as well. Like, there would be days when I would have to choose; it would be between, do I finish this homework? Alternatively, do I go to my (weight) lift? Obviously, I would choose the homework because I was a student before I was an athlete, but it is like, there is always that guilt when you do not do the lift.

As a Canadian student-athlete, Phillip understood his chances for athletic career development after university were doubtful. As a result, his academics were prioritized to ensure further career development in his academic field. Without the initiative and determination to get his academic work done during the breaks in his practice, Phillip would likely have allocated the little remaining time in his day to completing his academic requirements. Although the expectation is to excel in academics and athletics, the issue of identity—role conflict is evident for most athletes (Jayakumar and Comeaux 2016). The conflicting nature of being a student-athlete is to excel in athletics and academics while being placed under severely limiting time constraints and often forced to prioritize between the two options.

Finding a healthy balance of academics, athletics, and social time can be challenging, as one of these roles often takes priority at any given time (Crocker, Chard, and Duncan 2021; Jayakumar and Comeaux 2016). The prioritization of athletics is often subconsciously decided due to the demanding nature of the sport and the increased time

commitments. Prioritizing athletics over academics is familiar to most elite-level university athletes or athletes with aspirations of athletic career progression post-graduation.

Crocker, Chard, and Duncan (2021) argue that many student-athletes report prioritizing athletics over academics, even without professional career aspirations. However, athletes like Phillip challenge the consensus found in the literature:

If you're an athlete in the US, you're more likely to have an opportunity to create a living off of being an athlete; you know, student-athletes kind of have that edge on us. If you're a student-athlete in Canada, you're kind of stuck being that athlete for your school until you graduate. Unless you're top of the line or have contacts outside of Canada, you aren't necessarily going to have those opportunities as the American students do. I think that's why a lot of student-athletes in Canada feel the need to excel in school as well, because that's their backup. I mean, I would honestly say that being an athlete is a backup. So, we're more focused on academic achievements rather than athletic achievements because we know that after university, we are unlikely to continue with athleticism.

Phillip's experiences highlight a clear cultural distinction in the Canadian context. With limited potential for athletic development past the university stage, the importance of education was evident across all research participants. The concern for balancing roles in the Canadian context demonstrates the importance of the responsibilities of the student-athlete experience despite their athletic schedule heavily favouring their athletic role. While athletics is heavily prioritized, many Canadian athletes aim to excel academically and find it a considerable source of mental stress.

## Injury

The theme of injury was prominent within all participants' stories. Various stressors can be identified as contributing to adverse mental health but are inconsistent across different student-athletes. Injury is a common and significant mental health risk factor among athletes due to the high probability of an athlete experiencing some form of injury during their varsity career. The destructive nature of athletic injury and its psychological impact was evident throughout the research interview with Molly, a promising prospect in women's soccer. When asked to identify the significant factors that impact mental health in student-athletes, her answer indicated a psychological battle with her experience of injury and missed playing time:

In the moment, I just was very confused and off-put. So, definitely, not playing threw off my mental health a lot. When I did get my chance to start my very first game, it was our very first conference game of the season against one of our other teams in the conference. And in the first 15 minutes of the game, I sprained my ankle. So, like my very first game, the very first time I played, I got hurt and had to come off the field. So that, you know, finally earning that spot really validated all of the work that I was putting in and all the

struggle, you know, being away from home, being a university student for the first time . . . it was really weighing on me like this is not what I expected. But then being pulled aside and being told that I was going to play it was just like, okay, like this has all been worth it. Like I know, I'm going to start. I'm going to play. I've earned my spot and the starting position. And then to get knocked out of it by an injury . . .

Elite athletes fear few situations more than injury, so time away from sports and experiencing injury can be a significant psychological challenge for most athletes. For elite-level athletes, there is an elevated risk of adverse mental health in athletes who experience severe or multiple injuries (Rice et al. 2016). For Molly, waiting patiently for playing time and immediately getting injured was the catalyst for emotional distress. In this population, an injury can start an uncontrollable spiral, affecting every facet of the athlete's life. Adverse mental health in response to injury will significantly impact the student-athlete's social life and academics, making their responsibilities even more challenging to manage than before. Not only does injury call into question the athlete's identity, but it also calls into question the future role of the injured athlete. A fear regarding injury is that once recovered, athletes will lose their place on the team or no longer be needed. The response to injury is unique to the individual and poses significant emotional and psychological outcomes in minor and major athletic injuries.

During her recovery, Molly was frustrated with her injury and acknowledged her other challenges as an athlete:

It's really the first time I ever noticed that I was struggling mentally. And even then, it took me months afterwards reflecting on that experience to be like, okay, yeah, like now I understand what was going on. I was away from home, and then I just got hurt and like being injured. So all of that stuff coupled with losing the spot that I only had for 15 minutes was not . . . it was definitely tough for me. And again, I didn't realize that it was like I was starting to struggle because I've never really struggled like that before. But yeah, definitely seeped its way into other aspects, too. I was in a long-distance relationship, and it just completely turned upside down because I was so miserable. And I just like felt like I was dragging other people into that misery trying to like seek some sort of, like attention or validation outside of soccer.

As the level of sports participation increases for an athlete, the risk of adverse mental health increases with the experience of injury. Many student-athletes' identities are heavily tied to their involvement in sports. It poses significant mental health risks for those who miss extensive time due to injury or face athletic retirement (Jewett, Kerr, and Tamminen 2018). For Molly, the impact of injury sent her into a spiral that negatively impacted her mental health and challenged the athletic identity she had built since starting soccer at a young age. The collateral damage caused by her injury was apparent. Molly felt like a number and useless once she could not play. Her account highlights an unfamiliarity with the

feelings that are distinctly associated with her injury experience. When asked to expand on her comments about her mental health, she explained:

Um, I definitely just felt well, first of all, miserable, just like I don't like, I don't want to say depressed. I was definitely more down, and I just isolated myself a lot from everybody because I felt like I just didn't belong on the team. And like not getting along with the people who lived in my dorm, my other teammates, just didn't help with that. But I, like, I just kind of felt miserable. Like, I just want to lash out at a lot of the people closest to me, even though they didn't necessarily like deserve it. So like, my like now ex-boyfriend, like, I would pick fights all the time when I never really would before. I just like didn't want to go to practice or games, I just wanted to not play anymore pretty much as childish as that sounds. I was just like, what I was once passionate about with sports was soccer. Like, I just it was dead. Like I felt just nothing, really, I guess. So when I would get like excited or nervous before games, I just didn't really care because, well, I'm not playing.

Molly's story of injury and psychological distress is unique but highlights the overwhelming reality for many in this population. The issues of social isolation and collateral impact on the athlete's life roles demonstrate that missed time from team activities and competition due to injury can be a significant stress and risk to athletes' mental health. Any period of injury can be highly damaging psychologically for athletes, producing extreme feelings of isolation and uselessness while receiving treatment or in the team environment (Crocker, Chard, and Duncan 2021). Furthermore, the psychological distress associated with athletic injury is likened to the grief process following bereavement (Hughes and Leavey 2012).

In a population that is responsible for balancing multiple roles, the psychological impact of injury on student-athletes is a point of concern. Withdrawal, social isolation, and psychological distress can send the life of a student-athlete into a downward spiral without adequate support and care options. The account of Molly's injury experience demonstrates the complexity of injury for the student-athlete while demonstrating the impact of missed athletic participation in all aspects of life. Athletic injuries and the possibility of career termination are significant sources of stress and psychological distress for competitive athletes (Ströhle 2018). For female athletes, the outcomes can be displayed through symptoms of anxiety, depressive episodes and disordered eating (Mast and Gentile 2019). Elitelevel athletes are perceived as machines, encouraged to play through physical pain and injury, no matter the long-term consequences for their health (Delenardo and Terrion 2014). The emphasis remains on physical rather than mental health despite the known challenges faced during the injury recovery.

## Discussion

This research study identifies the stressors and challenges reported by Canadian studentathletes (to understand the similarities and differences from the findings in the US literature), as well as to bring in the voices of the student-athletes to demonstrate how they narrate and make sense of their experiences. Drawing on narrative identity theory, the participants' narratives highlight the importance of their experiences in forging their sense of identity and their understanding of their time spent with mental health struggles. The excerpts shared by the research participants provide a snapshot of the narrative identity of the student-athlete, exploring the individual's evolving story and how they have become that person (McAdams 2019). These stories examined mental health stressors in the Canadian student-athlete context and how the athlete managed and made sense of these experiences. The collegiate-level athlete participants reported various mental health stressors in the Canadian university context but identified three major stressors for adverse mental health in their experiences: the pressures associated with athletic performance, injury, and maintaining academic success in a sport-focused environment.

There are both commonalities and slight differences in the student-athlete experience between athletes in Canada and the United States. Canadian student-athletes reported similar injury concerns, balancing roles and pressures to perform, but emphasized the importance of their education and career development due to the limited availability of professional sports in Canada. Despite the literature demonstrating concerning statistics among the general population of Canadian university students, Canadian university athletes' mental health and well-being are significantly understudied (Van Slingerland, Durand-Bush, and Rathwell 2018). Without identifying the unique characteristics and stressors associated with the Canadian context, the athletes remain vulnerable to adverse mental health and less effective treatment.

# Pressures, Expectations, and Poor Performances

In an athlete's eyes, there is a fine line between individual achievement and dissatisfaction. Elite-level athletes often demand excellence and near-perfect performance from themselves, with anything below this standard perceived as a failure (Newman, Howells, and Fletcher 2016). While the internal pressure to perform is at the forefront, there are added pressures to compete victoriously while attempting to please fans, coaches, and teammates (Yang et al. 2007). The story of performance pressures and the psychological impact was typified within the narrative of cross-country runner, Malcolm. The account of his athletic participation outlines a disproportionate balance between perceived sporting success and failure based on the outcome of a competition. As a successful athlete, Malcolm has created an environment that makes it very difficult to satisfy his criteria for success. Anything less than excellence is seen as a failure that is destructive to his mental health, which was explained to be tied heavily to his athletic performance.

For Malcolm and many others, the expectation is to continue these levels of success at a higher level of athletic competition. This often creates increased internal and external pressures from those familiar with the athlete (Crocker, Chard, and Duncan 2021). With

so much of the student-athlete experience invested in athletic achievement, the results can feed into the student-athlete's mental health (Rao and Hong 2020). Malcolm emphasized that his pressure to perform was multilayered and unique to his sport, and his individual experience therein contributed to adverse mental health. For most, the pressures to perform are often personal and tailored to the individual experience. However, increased expectations to perform at the highest level allow for more experiences of disappointment and perceived failure.

Increased levels of pressure and expectation can cause an extremely stressful and mentally taxing athletic experience for student-athletes. As the level of competition progresses in collegiate athletics, the stakes can dramatically increase. With athletic success, the athlete competes for more prestigious outcomes, scholarships, and long-term career prospects (Rao and Hong 2020). While it is expected that elite athletes may have lofty expectations for their performance, the account from Malcolm identifies the alarming reality for some student-athletes. His experience focalizes the importance of athletic performance for his mental health and self-worth—Malcolm's identity as an athlete before university sports was built on athletic success. However, the increased level of competition and the less successful outcomes he had at university left him conflicted with the shift in his narrative identity. Given the volatile nature of athletics and the potential for perceived failure, the relationship between athlete mental health and athletic performance leaves many in a place of vulnerability and at increased risk for mental health disorders or psychological distress. Despite the inevitability of poor performances and athletic failure, it should not be viewed as "part of the game." Internal expectations, external pressures, and sporting outcomes must be examined and understood as a significant source of stress for student-athletes and often a catalyst for adverse mental health. This highlights the need for interdisciplinary mental health services that are contextually appropriate to the athletic population.

## **Dual Roles**

Despite a focus on athletic stressors in mental health literature on student-athletes, participants highlighted the challenges outside of the athletic context. General life stressors, including meeting academic expectations, changing sleep habits and poor eating habits, were attributed to adverse mental health in the population (Crocker, Chard, and Duncan 2021; Van Slingerland et al. 2019; Wilson and Pritchard 2005). The participant accounts of adverse mental health highlight some key themes that are prominent in the literature yet understate the importance of factors external to athletics. A common struggle for the everyday university student is the volume of work and the time management required to meet the demands of a full course load. A frequent concern for a university athlete is similar, battling with the duality of roles and balancing their time to adequately cater to all facets of their student-athlete experience. A student-athlete is responsible for competition,

practice, film, recovery, and travel, often leaving their academics and social time for what is left. The stress associated with time commitments and balancing multiple roles can be mentally taxing and often trigger mental health concerns for many student-athletes (Van Slingerland, Durand-Bush, and Rathwell 2018). This was a focal point for many participants and represented here by the story of track-and-field athlete Phillip, who discussed the challenges of balancing roles as a significant source of stress. As an individual who excels in athletics and academics, role priority and time allocation challenges were substantial sources of conflict. Although he states that he was a student before an athlete, his story shows that his athletic commitments took priority in his schedule. His story outlines the lack of time available to excel in school, forcing him to complete homework during breaks in training.

The contradictory nature of the student-athlete equation is conflicting for studentathletes, creating an environment that works against the core principles of the student-athlete meaning. For most athletes in Phillip's position, their academic work would be sacrificed to fulfil their athletic commitments. Furthermore, the quality of the academics is uncertain if the work can be completed under such time constraints. Many athletes' increased time investment and commitment are a source of great stress. Not only is the time invested in their sport massively increased from before entering university, but the amount of social time they have is cut down significantly while balancing a heavy academic burden. Despite these challenges, the expectation is to perform well in academics and athletics, no matter the athlete's adversity (Valentine and Taub 1999). In the Canadian context, an athletic career after their time in university is improbable due to the limited professional opportunities in the country. As a result, many student-athletes rely on their university education to pursue a career. However, most cannot excel academically or in career pursuits while their athletics are prioritized. Although academics are outside the focus of athletics, academic success and career development are a source of stress for many student-athletes. Despite the focus on athletic stressors in the literature, a critical lens outside the athletic domain is crucial to understanding stress and mental health in student-athletes. There is significant stress outside of athletics for the student-athlete while balancing multiple life roles, and academics should be viewed as culturally significant in the Canadian context of mental health. Furthermore, excelling academically is uniquely recognized as a significant mental health stressor in the Canadian context, alongside injury and performance pressures.

# Injury

The impact of injury on mental health may be the most significant threat to studentathlete mental health and overall success while in university. Representative of so many other stories told by participants, the account from Molly emphasizes the impact that injury can have on the student-athlete and the collateral damage that can occur. When the athlete experiences an injury, it can spill into their academics and social life, inflicting further stress on the athlete and making their situation harder to cope with. Scholars identify injury as a catalyst for adverse mental health due to the perceived loss of identity, feelings of isolation and feelings of uselessness (Souter, Lewis, and Serrant 2018; Crocker, Chard, and Duncan 2021). The extent to which an individual identifies with their athletic role significantly differs for every athlete but plays a significant role in the injury experience. However, the impact of injury appears to be a critical psychological stressor despite the level of athletic identity or role prioritization. Many variables and stressors can impact the student-athlete's mental health, but the student-athlete experience is different across the population. Although academics and poor performance are significant stress points for many athletes, they are not for others. The one variable among all student-athletes is the decision to be an athlete. At the same time, they attend school, and the injury experience impacts a large portion of the athlete's identity and familiarity as a university student. Molly's story demonstrates that removing athletic participation creates feelings of unbelonging, uselessness, and turmoil in multiple parts of her life. Injury can also encourage a humbling revaluation of values and future aspirations, often leading to re-negotiating goals as an athlete (Crocker, Chard, and Duncan 2021). These issues are significant for student-athletes as the foundation for much of this population is an identity built and shaped by their participation as athletes. A strong identification as an athlete can affect self-esteem and overall mental health in the event of injury (Coker-Cranney et al. 2017). Being a student-athlete requires vast amounts of commitment and creates numerous challenges for the athletes. Despite the daily hardships and stress, athletic participation in school is incredibly important to the population. The shared experience of athletic participation at the university level creates a distinct risk factor for mental health across university athletes that is unique to other mental health stressors. The significance of injury to an elite-level athlete can be psychologically damaging to the athlete, consequentially causing anxiety, depressive episodes, or worsening mental health conditions (Hughes and Leavey 2012; Mast and Gentile 2019; Ströhle 2018). Although the injury is a physical experience predominantly viewed as a physical issue, prioritizing mental health support and screening for injured athletes should be explored across university athletic associations.

## Conclusion

Student-athletes encounter distinct challenges as they balance their athletic commitments and academic responsibilities, which can leave them susceptible to negative mental health outcomes. Unfortunately, rates of mental health conditions are on the rise in younger populations, and student-athletes are not immune to this trend (Souter, Lewis, and Serrant 2018). The particular stressors associated with collegiate-level competition place this

group at particularly high risk. The first-hand accounts of members of the Canadian student-athlete population reveal that there are slight differences between the stressors in the Canadian context compared to those commonly reported in the literature. Participants highlight academic failure and limited career development opportunities as causes of stress. As much of the Canadian experience resonates with existing data, issues of academic success and career development are overlooked.

Undoubtedly, there is a shortage of mental health professionals in Canada who specialize in sports, despite the higher prevalence of adverse mental health among student-athletes (Van Slingerland et al. 2019). One theme in our interviews with students regarding their mental health is the challenge of university-based mental health services. Not only are there limited services for mental health on campuses, but there are even fewer services that specialize in sports. However, the demand for mental health services in the Canadian student-athlete population remains unknown. To better serve student-athletes in Canada, gaining a comprehensive understanding of the individuals involved and acknowledging Canadian university athletics as a unique entity are essential. Although there may be similarities with the US experience, it is vital to approach the mental health of student-athletes from a culturally distinct perspective. Further research is necessary to determine the core stressors and identify the services accessible to address the mental health concerns of student-athletes. Only in doing so can we ensure that student-athletes are comprehensively supported in all facets of the university experience and provided with athlete-specific mental health care.

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