# EXPLORING THE EXPERIENCES OF HIGH PERFORMANCE CANADIAN ATHLETES WITH MOOD AND/OR ANXIETY DISORDERS

#### LAUREN DICKLER

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#### Abstract

Until recently, it was widely assumed that mood and anxiety disorders were not common medical problems for high performance athletes (e.g., Dean & Rowan, 2013; Markser, 2011; Reardon & Factor, 2010). However, as athletes come forward to share their struggles with mental illness, this assumption has been brought into question. Very little research has focused on mood and anxiety disorders in high performance athletes; what is known comes primarily from mass media and popular culture (e.g., Hughes, 2015; Marino, 2013). The purpose of this research was to explore the experiences of Canadian high performance athletes with mood and/or anxiety disorders, with a specific focus on their journey through their athletic career. Three athletes were recruited via purposeful sampling. Athletes currently or recently competed for places on Canadian national sports teams. Athletes participated in semi-structured interviews with open-ended questions related to their sporting careers and how they coped with being a high performance athlete and having a mood and/or anxiety disorder. Participants described dealing with stigma related to their diagnoses. Initially, treatment took a back seat to training and competition; ultimately, participants required a break from sport in order to effectively manage their illness. Participants expressed a need for education in the sport community regarding mood and anxiety disorders as well as greater access to psychologists for high performance athletes.

Findings are discussed within the context of existing research on high performance sport and mood/anxiety disorders. Preliminary implications include the development and evaluation of education programs to decrease stigma associated with mood and anxiety disorders and increase awareness of the signs and symptoms of mood and anxiety disorders, coupled with increases in funding for available resources in the sport community along with changes to current sport policy.

# **Dedication**

I dedicate this to every person who has been touched by mental illness.

You are not alone.

#### Acknowledgements

First and foremost, I want to thank the athletes who participated in this study: thank you for being open and honest about your experiences. I applaud you for your bravery and commend you for your courage in feeling comfortable enough to share your journey about a subject that is highly stigmatized.

To my lab mates past and present: I have enjoyed the time we have spent together and I appreciate your insights and input on the research process. I would be remiss to not give an extra big thank you to Lauren: I could not have done this without you in my corner!

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To my supervisor, Dr. Jessica Fraser-Thomas: you are a saint! Thank you for standing by me and supporting me both with my research and my health. You are a great example of what people can and should do to understand and support people with mental illness. You are both my supervisor and my mentor and I look forward to continuing to work and learn from you. Now, time for you to get some sleep!

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And finally, to my nieces and nephew, Maya, Adina, Joey and Mason: thank you for putting a smile on my face even when I am at my most depressed and for instilling me with hope even when I feel hopeless. My dream is that by the time you are my age, we live in a world where saying you have depression/anxiety is the same as saying you have diabetes and that telling someone you have an appointment to see your therapist is the same as saying you have an appointment to see your dentist. I vow to continue to do my part to ensure this happens.

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#### Introduction

Between May and August of 2011, retired Major League Baseball (MLB) player Mike Flanagan, retired National Hockey League (NHL) player Wade Belak and active NHL players Rick Rypien and Derek Boogard died. Investigations revealed that Flanagan, Belak and Rypien died by suicide while Boogard died from an accidental drug overdose (Branch, 2013; Feschuk, 2011; Gillis, 2011; Lamberti, 2011; Madden, 2011; Turner, 2011). In the ensuing weeks, family and friends revealed that each man had been dealing with issues related to their mental health: Flanagan, Belak and Rypien had a history of depression and Boogard had a history of addiction. Accordingly, their deaths have helped to expose the issue of mental illness in elite athletes (Cotsonika, 2011; Gillis, 2011; Mulholland, 2011).

Mental illnesses, or mental disorders, cause disturbances in thinking, behaviour and the expression of emotion. They include mood disorders, anxiety disorders and addiction related disorders (American Psychiatric Association, 2013). According to Statistics Canada (2013), in 2012, 10.1% of Canadians aged fifteen years or older (approximately 2.8 million people) reported having symptoms related to depression, bi-polar disorder, generalized anxiety disorder or alcohol and drug abuse. Additionally, 17% of Canadians aged fifteen years or older (approximately 4.9 million people) reported needing services to address mental health care (Statistics Canada, 2013). Furthermore, the estimated economic impact of mental illness in Canada for the year 2011 was over \$48 billion and this number is expected to grow to over \$306 billion by 2041, unless there is change to public policy addressing this health issue (Smetanin et al., 2013). Collectively, these numbers indicate that mental illness is a problem warranting attention.

According to Statistics Canada (2013), mood disorders and anxiety disorders are the most common forms of mental illness in Canada. The Mood Disorders Association of Ontario (n.d.) describes mood disorders as a group of mental illnesses that are characterized by a change in a person's mood. Mood disorders can be unipolar (i.e., mood moves up *or* down) or bipolar (i.e., mood moves up *and* down). Unipolar mood disorders include Major Depressive Disorder (MDD) (i.e., clinical depression) while bipolar mood disorders include Bipolar I (BDI) and Bipolar II (BDII) (Mood Disorders Association of Ontario, n.d.).

MDD is characterized by feelings of extreme sadness over an extended period of time (a minimum of two weeks) (American Psychiatric Association, 2013). Other symptoms include: loss of interest and pleasure in activities, significant weight loss or gain, insomnia or hypersomnia, fatigue or loss of energy, loss of concentration or indecisiveness, feelings of worthlessness/guilt or lowered self esteem and thoughts of death, suicidal ideation, suicide attempt and/or a suicide plan. People with MDD report significant impairment in daily functioning in both social and work settings (American Psychiatric Association, 2013). MDD has a lifetime prevalence rate of 11% to 12% in Canada. This means that approximately 3 to 3.5 million Canadians will be diagnosed with MDD in their lifetime (Pearson, Janz, & Ali, 2013).

Both types of BD involve bouts of depression; however people with BDI cycle through mania, hypomania and depression whereas people with BDII do not have manic episodes, and instead, cycle between hypomania and depression (American Psychiatric Association, 2013). In both types of BD, depression symptoms are the same as MDD. Symptoms of mania and hypomania include an inflated sense of self, decreased need for sleep, an increase in activity and involvement in dangerous activities (for example, heightened drug use/abuse, spending money recklessly and/or engaging in risky sexual behaviour). To be diagnosed with BDI, mania must

last for a minimum of one week and be disruptive to the person's social and/or work life (American Psychiatric Association, 2013). Hypomania is a less intense form of mania; a hypomanic episode must only last for four consecutive days (versus one week for mania). Thus, the major distinction between BDI and BDII is the occurrence of mania. People only need to have had one manic episode in their lifetime to be diagnosed with BDI (American Psychiatric Association, 2013). The lifetime prevalence rate of BD in Canada is 2.6%. This means that approximately 780 000 Canadians will be diagnosed with either BDI or BDII in their lifetime (Pearson et al., 2013).

Anxiety disorders cause people to experience a more intense form of anxiety than the rest of the population (Canadian Mental Health Association [CMHA], n.d.b; Anxiety Disorders Association of Canada, 2003). Types of anxiety disorders include: obsessive compulsive disorder (OCD), phobia and panic disorders, generalized anxiety disorder (GAD) and anxiety disorder not otherwise specified (NOS). Although each disorder has different triggers, they all lead to heightened levels of anxiety. As a group, anxiety disorders are the most common mental illness in Canada. The lifetime prevalence rate is 25% which means approximately 7.5 million Canadians will be diagnosed with at least one anxiety disorder in their lifetime (CMHA, n.d.b; Anxiety Disorders Association of Canada, 2003).

Until recently, it was widely assumed that mood disorders, such as depression, and anxiety disorders, were not common medical problems for elite athletes (e.g., Baum, 2005; Dean & Rowan, 2013; Markser, 2011; Reardon & Factor, 2010). The deaths of Flanagan, Belak, Rypien and Boogard as well as other athletes who have come forward to share their experiences with mental illness (including Canadian Olympian Clara Hughes, Canadian tennis player Rebecca Marino and Canadian MLB player Joey Votto) provide concrete evidence that athletes

are not immune (FoxSports Ohio, 2009; Hughes, 2015; Marino, 2013; Stroumboulopoulos, 2012). By sharing their stories, athletes have likely helped to increase awareness of mental illness, but a review of the current literature reveals that there has been no empirical research focused on the experiences of high performance athletes with mental illness. The purpose of this research was to explore the experiences of Canadian high performance athletes with mood and/or anxiety disorders, with a specific focus on their journey through their athletic career. Research questions included: (a) What are the circumstances and processes by which high performance Canadian athletes come to recognize and diagnose their illness?; (b) What are some of the common challenges faced by high performance Canadian athletes?; and (c) What strategies do high performance athletes use to negotiate mental illness and participation in high performance sport?

#### **Literature Review**

Given that until recently, it was widely assumed that mood disorders, such as depression, and anxiety disorders, were not common medical problems for elite athletes (e.g., Baum, 2005; Dean & Rowan, 2013; Markser, 2011; Reardon & Factor, 2010), very little research has focused on mood and anxiety disorders in elite athletes; what is known comes primarily from mass media and popular culture (e.g., FoxSports Ohio, 2009; Fish, 2015; Hughes, 2015; Marino, 2013; Stroumboulopoulos, 2012). Therefore, this literature review examines the current empirical literature on mood and anxiety disorders in high performance athletes as well as information from mass media and popular culture. Given the practical implications of this research, the review concludes with a brief look at sport policy in Canada

#### Stigma and Elite Athletes

Given the prevalence rates of mood and anxiety disorders, it might seem surprising that there is minimal research addressing how these disorders affect elite athletes. One possibility for this may be stigma. Stigma is the "negative connotations and false assumptions connected with mental illness" (Overton & Medina, 2008; p. 143). Negative connotations/false assumptions associated with mental illness include: thinking that people with mental illness are "abnormal", "dangerous" or "unpredictable", people with mental illness are to blame for their condition, and only people who are weak become mentally ill (Centre for Addiction and Mental Health, 2007; Green, Hayes, Dickinson, Whittaker, & Gilheany, 2003; Whalen, n.d.). The stigma influencing the lack of research regarding mental illness and elite athletes can be divided into four sub categories: 1) mistaken beliefs; 2) mistaken diagnosis; 3) mistaken perception and; 4) the culture of sport.

As previously mentioned, one of the reasons for the lack of research may be the mistaken belief that athletes cannot become mentally ill because they have to be mentally strong in order to compete (Baum, 2005; Dean & Rowan, 2013; Markser, 2011; Reardon & Factor, 2010). This thought is based on the belief that only those who are mentally weak can be diagnosed with a mental illness; since elite athletes have to be physically and mentally strong in order to compete, it is rationalized that they cannot become mentally ill. This is an example of the stigma associated with mental illness because mental strength has no bearing on whether someone will become mentally ill (Whalen, n.d.). With many athletes coming forward to discuss their experiences with mental illness (for example, Canadian Olympian Clara Hughes, American Olympian Lindsey Vonn, MLB Player Joey Votto), this belief (i.e., that athletes cannot be mentally ill) has been proven false. This mistaken belief likely also ties in with the second sub-

category: misdiagnosis. According to Schwenk (2000), overtraining/burnout and depression present with similar symptoms including fatigue, low energy and diminished interest in activities; yet when athletes go to a doctor with these symptoms, they are more likely to be diagnosed with overtraining/burnout than depression. Schwenk contends if the same athletes went to doctors and did not disclose that they are athletes, they would be diagnosed with depression. Misdiagnosis is not only limited to overtraining/burnout. Prior to being diagnosed with depression, anxiety and panic attacks, Joey Votto paid several visits to the hospital (FoxSports Ohio, 2009). Doctors told him he had problems with his ears and he was sent on his way. As a professional baseball player, Votto has regular access to team trainers and doctors, but they also failed to diagnose him with a mood and anxiety disorder; instead they preferred to blame his issues on physical ailments (FoxSports Ohio, 2009). Ultimately, it was Votto's perseverance that led to his diagnosis as he refused to accept that his problems could be attributed to physical illness. Votto's experience further highlights how important it is that medical professionals consider mental health diagnoses for athletes just as they would for the general population.

The third sub-category, misperception, is supported by research conducted on American collegiate athletes (e.g., Kamm, 2005; Reardon & Factor, 2010). This research suggests that athletes are unlikely to seek professional assistance for fear of being looked at negatively by fellow athletes and coaches. These studies demonstrate that college athletes have negative views of fellow athletes who have used mental health related services (for example, seeing a counsellor to deal with performance issues) and they rate them as being less desirable teammates (called the "negative halo" effect). The theory is that it is this negative perception that stops athletes from

seeking help because they do not want to be labelled as less desirable (Kamm, 2005; Reardon & Factor, 2010).

Finally, the culture of sport may also be to blame for the lack of research. Athletes have been taught over the years that they must compete through pain and it is possible that this has led them to be less likely to share how they are feeling compared to the general population (Glick, Stillman, Reardon, & Ritvo, 2012; Wiese-Bjornstal, 2010). Additionally, research has shown that some athletes do not seek help because they are unaware that how they are feeling is due to a mood disorder (Begel, 1994; Linder, Brewer, Van Raalte, & De Lange, 1991). As a result, they do not realize that they have a serious illness. Instead, they feel that what they are experiencing is normal, and therefore, they can manage it themselves.

#### **The Diagnostic Statistical Manual**

Stigma may not be the only explanation for the minimal empirical research. Another explanation may be the manner in which mental illnesses are diagnosed. In Canada, mental illness is diagnosed by mental health professionals (for example, a doctor, psychologist, social worker or health care worker with specialized training in mental health care) (CMHA, n.d.a). Currently, mental health professionals rely upon the most recent Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association, 2013). It is possible that the reason for the lack of diagnoses has to do with the diagnostic criteria. The DSM-5 states that the behaviours and/or feelings associated with MDD, BD and anxiety disorders must cause significant impairment in the individual's life (American Psychiatric Association, 2013). Therefore, if all the symptoms are present, but there is no perception of significant impairment, this would likely mean no diagnosis. Georges St-Pierre, the former Ultimate Fighting Championship (UFC) welterweight champion, has said that he feels his OCD helped to make

him a champion because it forced him to obsess over being the best (Smith Cross, 2014). Since St-Pierre argues that OCD has been a help and not a significant impairment, other athletes might feel the same about their mood and/or anxiety disorders. Perhaps some mood and anxiety disorders might actually facilitate athletic success, and therefore, not meet the criteria set out by the DSM-5.

As well, there has been some controversy that the DSM itself is a flawed tool. Cooper (2004) argues that since the DSM is based on theory, its ability to diagnose is only as good as current theory. Furthermore, theory is often based on societal norms and pressures. For example, Cooper discusses how homosexuality was originally included in the DSM as a mental disorder. In 1970, gay activists protested this classification, and ultimately, homosexuality was removed. Therefore, Cooper suggests in the future, as societal norms change, disorders currently included in the DSM might also be removed. Conversely, Cooksey and Brown (1998) argue that the DSM is flawed because it considers disease from a medical perspective and does not take into consideration the social and cultural environment in which it operates. They contend that this makes it difficult to accurately address the needs of the patients as dysfunctional behaviour may be ignored if societal norms are not considered. Although there is disagreement on how the DSM is flawed, it is possible that the criteria outlined by the DSM are one of the reasons that athletes fail to be diagnosed with a mental illness.

### **Mood and Anxiety Disorders Among Athletes**

Although there may be little empirical research in the area of elite athletes who compete in professional leagues or who represent their country at international competitions, there is research that has looked at other high level athletes (for example, American collegiate athletes, high school athletes, retired athletes, etc.). In 2010, Reardon and Factor published a systematic

review of all psychiatric research on mental illness in athletes. Using search terms, including, "psychiatry", "mental illness", "athletes", "sports", "depression and "anxiety", they found 172 papers, and ultimately, included 103 in their review. From their review, they highlighted the importance of mental health professionals considering the unique characteristics and needs of athletes when it comes to diagnosis and treatment. For example, they mentioned the importance of considering the stresses involved in being an athlete. Additionally, they noted studies that had been conducted on retired athletes that found depressive symptoms to be the same as those in the general population (Backmand, Kaprio, Kujala, & Sarna, 2003; Reardon & Factor, 2010; Schwenk, Gorenflo, Dopp, & Hipple, 2007). They reported finding no research on BD and only one study related to anxiety disorders (specifically social anxiety disorder) (Reardon & Factor, 2010). Their findings, or rather their lack of findings, stress the importance of the need for research.

Research with American collegiate athletes suggests that they experience greater pressure and anxiety than non-athletes and, therefore, might be at a greater risk for depression; however prevalence rates of depression in American collegiate athletes are unknown (Etzel, Watson, Visek, & Maniar, 2006; Maniar, Chammberlain, & Moore, 2005). Additionally, female collegiate athletes are 1.32 times more likely to experience symptoms of depression than their male counterparts (Yang et al., 2007). This provides some insight into how athletes may feel and experience mood and anxiety disorders and provides a stepping stone for future research.

Although prevalence rates of mental illness in Canadian elite athletes are unclear, research from other countries suggests that for most mental illnesses, prevalence rates may be similar to or higher than those found in the general population. A study on Australian elite athletes found that almost half of all respondents met the criteria for at least one mental health

problem (either general psychological distress, depression, generalized anxiety disorder, social anxiety, panic disorder or eating disorders); a number comparable to the general Australian population (Gulliver, Griffiths, Mackinnon, Batterham, & Stanimirovic, 2015). A similar study conducted in Germany found a prevalence rate of 19% for major depression in their sample of elite athletes; a number higher than that found in the general German population (Nixdorf, Frank, Hautzinger, & Beckmann, 2013). Both sets of researchers caution that it is possible that the way they defined 'elite athletes', coupled with the number of injured athletes in the study, may have resulted in inflated rates. However, collectively, the two studies suggest that prevalence rates of mental illness among elite athletes appear to be similar to or higher than in the general population.

#### Elite Athletes' Stories

Turning to mass media and popular culture, some of our knowledge regarding mood and anxiety disorders in elite athletes has been collected from auto-biographies, newspaper articles, and interviews athletes have given to journalists. For example, these interviews suggest athletes have had to take time off from sport or leave sport entirely in order to effectively manage their mood and anxiety disorders (e.g., Brady, 2013; FoxSportsOhio, 2009; Marino, 2013; Stroumboulopoulos, 2012). Clara Hughes, a Canadian Olympian, was only able to compete for a total of fifteen weeks over a two year period after being diagnosed with MDD. Additionally, Hughes maintains that although she made attempts at therapy throughout her career, it really was not until she retired from sport that she fully engaged in regular talk therapy (i.e., psychotherapy) with a clinical psychologist (Hughes, 2015; Stroumboulopoulos, 2012). Joey Votto tried unsuccessfully to play baseball while he was battling depression, anxiety and panic attacks and, ultimately, was placed on the disabled list so he could focus on his health (FoxSportsOhio,

2009). Rebecca Marino, a Canadian tennis player, first took a year off to battle depression, returned to the game, and then decided to retire for good at the age of 22 (Brady, 2013; Marino, 2013). Mardy Fish, an American tennis player, continued to play tennis after being diagnosed with an anxiety disorder, but when he had a panic attack on court during a match, he found himself too anxious to continue his career, so he left the sport to treat his illness (Fish, 2015). Finally, Georges St-Pierre, a Canadian UFC fighter, decided to take a break from the sport in order to focus on dealing with his OCD (Smith Cross, 2014).

Athletes have also discussed their unease about sharing their diagnosis, for fear of being labelled weak. Rebecca Marino, in a Tedx Talk she gave in Victoria, British Columbia, said, "I hid it from everyone. I did not want to be a burden because as an athlete, you are supposed to be strong, right?" (2013). Mardy Fish similarly highlighted how difficult it was to talk about mental health because athletes are trained not to show weakness (Fish, 2015). Clara Hughes, diagnosed in the late 1990s, did not share her diagnosis until 2011 because she felt ashamed (Stroumboulopoulos, 2012). Gillian Carleton, a Canadian Olympic cyclist, hid her depression, because she was taught to not talk about her weaknesses (Spencer, 2014). Finally, Steven Holcomb, an American Olympic bobsledder, hid his depression because he did not want to be viewed as weak (Warsinskey, 2014). This fear of being seen as weak may be influenced by athletic identity.

#### **Unique Considerations Among Elite Athletes**

Athletic identity, the extent to which an athlete identifies with being an athlete, has been implicated as a risk factor for poor adjustment when events threaten an athlete's ability to perform the athlete role (Brewer, Cornelius, Stephan, & Raalte, 2010). For example, high rates of athletic identity have been found to cause negative effects on athlete adjustment after serious

injury and retirement (Brewer, 1993; Grove, Lavallee, & Gordon, 1997; Manuel et al., 2002; Webb, Nasco, Riley, & Headrick, 1998). Although there is very little research on the interaction between athletic identity and mental illness, it is possible that athletic identity plays a role related to coping with diagnoses as well as the decision to publicly speak out about mental illness. However, in their framework, Scheme of Change for Sport Psychology Practice (SCSPP), Samuel and Tenenbaum (2011a) suggest that athletes with a stronger athletic identity do not view "change-events" (i.e., events which may disrupt the status quo of an athlete) any differently than athletes with a weaker athletic identity, and therefore, do not believe that athletic identity is a predictor of help-seeking behaviour/adjustment. Instead, they highlight the importance of readily available support, pre-existing coping strategies and motivation for change (Samuel & Tenenbaum, 2011b). The SCSPP framework was not tested on athletes whose change-event was the diagnosis of a mental illness, so it is still unclear how or if athletic identity plays a role, although anecdotally it appears that it might exercise influence over decision making and adjustment. Interestingly, athletes have been vocal about how sharing their experiences has made them feel stronger, less alone and has been a positive part of their recovery (Fish, 2015; Hughes, 2015; Spencer, 2014; Stroumboulopoulos, 2012; Warsinskey, 2014).

Further, there is a belief in both academic circles and in popular culture that there might even be mood and anxiety disorders that are unique to athletes. These disorders have been labelled "failure based depression" and "post Olympic depression/blues" or "post Olympic anxiety." As defined by Hammond, Gialloreto, Kubas, and Davis IV (2013), "failure based depression" is depression experienced by athletes after performing worse than their personal best at important competitions. In their study of Canadian swimmers competing for a spot on the Canadian Olympic team and/or the World Championship team, they found that performing

worse than a personal best was a greater predictor of post-competition depression than a history of MDD. Furthermore, they found this relationship was greater amongst the elite of the elite (i.e., swimmers who ranked in the top 25% of the sample) and there was a significant difference between male and female swimmers, with female swimmers more likely to meet the criteria of MDD. This has important implications in terms of being able to predict and proactively treat athletes who may be more susceptible to this type of depression, however, given that this is the first study of its kind as well as the small sample size (n=50), the results should be interpreted with caution.

"Post Olympic depression/blues" or "post Olympic anxiety" has received attention in the mainstream press (articles on this topic have been published in "The Toronto Star", "The Daily Beast" and "The Daily Mail"), but it has received very little empirical consideration. This phenomenon is described as a 'psychological letdown' after a big event (Gillis, 2012). As described by Gillis (2012) and Woodsworth (2012), athletes who have been training for months (and years) travel to an event, where they are living amongst peers and their sole focus is on their competition. For an extended period of time, they are on a strict training schedule and are always surrounded by people they know. Once the event ends and athletes return home, they are no longer on a schedule and no longer surrounded by peers. As a result, they report feeling empty, bored and full of nothingness. They ask themselves, "what now?" and find they have trouble sleeping and lack interest in engaging in regular activities. It is interesting that these feelings are reported both by athletes who have met their Olympic goals and those who failed to meet their goals (Alexander, 2014; Dokoupil, 2012; Mail Online, 2012). This suggests that the phenomenon is likely different than the failure based depression investigated by Hammond et al. (2013). In terms of recovery from post Olympic Blues, it has been suggested that resuming

training, at a very basic level as soon as possible, is the best way to recover; while athletes who have experienced post Olympic Blues report that getting back onto a regular schedule (whether it be via training, speaking engagements, media appearances or working) helped them snap out of their blues (Alexander, 2014; Gillis, 2012).

Given the lack of empirical research on the post Olympic Blues, there is still a need to better understand individual and situational factors surrounding these cases, as there are athletes who have reported that their post-Olympic depression led to lengthy battles with MDD and/or addiction. Olympians Ian Thorpe (Australian swimmer), Cassie Pattern (British swimmer) and Shane Gould (Australian swimmer) are three such examples. Thorpe spent his post Olympic time drinking and since the early to mid 2000s has been battling addiction and MDD (Alexander, 2014). Pattern talks about heading back to the pool for training after winning a medal at the 2008 Olympics and sitting on the deck crying (Mail Online, 2012). Gould, who competed at the 1972 Olympics in Munich, suffered from MDD for over two decades after winning his five medals (Dokoupil, 2012). The three athletes cited here were all swimmers as were the athletes involved in Hammond et al.'s failure based depression study, highlighting a need to further investigate sport specific conditions surrounding post Olympic Blues, beginning perhaps with differences between individual and team sports.

#### Canadian Sport Policy/Resources and Mental Health

Finally, a brief examination of sport policy, high performance support services and coach training in Canada is necessary in order to understand the supports that exist for high performance athletes with a mood and/or anxiety disorder. The body that oversees sport development and funding in Canada is called Sport Canada (Government of Canada, 2014). A review of the Sport Canada website reveals no specific policy that addresses mental health in

sport (Government of Canada, 2013a). Sport Canada's "Athlete Assistance Program (AAP)" outlines policies and procedures related to high performance athlete assistance. First, National Sport Organizations (NSOs) are required to nominate athletes for the AAP. Athletes nominated must be Canadian citizens or permanent residents and must meet the following criteria: they are asked to sign and obey the athlete agreement prepared by their NSO, they have to meet their sport's international federation requirements and be available to represent Canada at international events and they must meet carding criteria for international events, national events and/or other events sanctioned by their NSO. Although the program does not speak about mental health specifically, it does address illness (Public Works and Government Services Canada, 2015). The document states that every NSO should have its own policy for handling athlete illness; however, it does lay out standards athletes must meet to continue to receive funding from Sport Canada while ill (2015). These standards, for athletes who miss more than four months of training, state that athletes must sign an agreement committing to full training once healthy and must provide a written statement from an NSO physician that their prognosis is positive and will return to training and competing within eight to twelve months (Public Works and Government Services Canada, 2015). As each NSO can create its own policy regarding illness, a summary of every Canadian NSO policy is out of the scope of this review. High performance athletes are provided with extended health care insurance from which they can access support services through the Canadian Sport Institutes (Government of Canada, 2013b). Services include experts related to performance and support, including psychologists, however support for mental health is not explicitly stated (Canadian Sport Institute of Ontario, 2014).

Some progress towards supports that offer greater consideration to mental health have recently been proposed. For example, the Coaching Association of Canada (2014) provides

training and certification to coaches of all levels. While there is no training that specifically addresses mood or anxiety disorders in athletes, there are optional training modules related to concussions and mental skills training that may touch on mental health (Coaching Association of Canada, 2014). Further, in September 2015, the Canadian Olympic Committee, Canadian Paralympic Committee and the Canadian Olympic and Paralympic Sport Institute announced the creation of "Game Plan", a program designed to provide Canadian athletes with resources and educational materials. The program was to include online access to twenty-four hour mental health support as well as mental health awareness training (Heroux et al., 2015). However as of June 2016, the program is still in a building phase and considered a "work in progress", and therefore, it is unclear what type of support is actually available to Canadian athletes (J. Brown, personal communication, June 16, 2016).

#### **Study Rationale and Purpose**

Much is to be learned about how athletes experience, manage and overcome (or do not overcome) mood and/or anxiety disorders. The purpose of this research was to explore the experiences of Canadian high performance athletes with mood and/or anxiety disorders, with a specific focus on their journey through their athletic career. Research questions included: (a) What are the circumstances and processes by which high performance Canadian athletes come to recognize and diagnose their illness?; (b) What are some of the common challenges faced by high performance Canadian athletes?; and (c) What strategies do high performance athletes use to negotiate mental illness and participation in high performance sport?

#### Methodology

# **Study Design**

This research was a qualitative study that employed tenants of grounded theory as described by Kathy Charmaz (2006). According to Charmaz, grounded theory is a set of principles and practices that are used to build a theory or develop a theoretical explanation grounded in the data itself. It involves gathering rich data, selecting participants through theoretical sampling and simultaneously engaging in data collection and analysis (Charmaz, 2006). Although the goal of this study was not to develop a theory, it became evident that using some of the principles of grounded theory, particularly as they related to data collection and data analysis, would be beneficial. For example, interviews were coded and analyzed immediately to look for emerging themes. As these themes emerged, a literature search was conducted and this process was repeated after each interview (see the data analysis section for more detail).

Additionally, although a literature review was completed prior to the study, due to the lack of research in this subject area, it became clear that a more in-depth literature review would be completed during the data analysis phase. This, too, is in line with grounded theory (Charmaz, 2006).

### **Participants**

Participants in this study were high performance Canadian athletes with a mood and/or anxiety disorder. For the purposes of this research, "high performance Canadian athletes" was defined as athletes who had currently or recently competed for places on Canadian national sports teams. Participants had to be diagnosed with a mood and/or anxiety disorder, by a mental health professional, at some point during their athletic career (i.e., prior to retirement); however they could be retired at the time the interview was conducted. Mental health professional was

defined as: a doctor, psychologist, social worker or health care worker with specialized training in mental health care (CMHA, n.d.a).

# **Participant Recruitment**

Participants were recruited via purposeful sampling. This type of sampling allowed the researcher to select participants who have experienced the phenomenon being researched (i.e., competing as a high performance Canadian athlete while having a mood and/or anxiety disorder) and were capable of sharing their experiences (Creswell, 2013). As a handful of well known Canadian athletes have publicly spoken of their mood and/or anxiety disorder via mass media and social media, the primary researcher was aware of these names and placed them on a list of potential participants. This list was expanded by conducting internet searches using a mix of key terms: "athlete", "Olympian", "Paralympian", "Canadian", "mental illness", "depression" and "anxiety". Athletes that met the requirements for the study were added to the list. The final list was comprised of fourteen athletes.

Each identified athlete was sent a letter providing background information on the research and inviting them to participate (see Appendix A). Of the fourteen athletes, each one was contacted in a means that seemed most suitable. Eight athletes were sent their invitation via a personal website/email or through the website of an organization with whom they worked. Three athletes were contacted via their NSOs and three were connected to the researcher via snowball sampling. In snowball sampling, participants or people aware of the research tell other people about the research and suggest that they become involved (Creswell, 2013). Two athletes turned down the invitation to participate; two athletes did not respond to the invitation; two NSOs never responded to the request to be put in contact with the athlete; four athletes expressed interest in participating, but when it came time to set up an interview, they stopped responding to

e-mails; and four athletes accepted the invitation to be a part of the research, however due to time constraints only three athletes were interviewed (see Table 1 for participant characteristics).

#### **Data Collection**

All participants were interviewed by the primary researcher. Two of the interviews were conducted via Skype (audio only) and one interview was conducted face to face at the location of the participant's choice. Although there is debate about whether or not telephone (Skype) interviews provide the same richness of data as those conducted face to face, Sturges and Hanrahan (2004) concluded that interviews conducted by telephone (Skype) are a valid way to carry out qualitative research and are not inferior to face to face interviews.

Interviews were semi-structured with open ended questions. An interview guide was designed that included questions related to participants' sporting careers, how they came to be diagnosed with a mood and/or anxiety disorder and how they coped with being a high performance athlete and having a mood and/or anxiety disorder. Sample questions included, "Tell me about yourself and the sport you play (played)" and "How did the diagnosis influence your experiences as an athlete – initially, and over time?" (see Appendix B for complete Interview Guide). Interviews lasted between 29 and 45 minutes. All interviews were digitally recorded.

#### **Data Analysis**

Interviews were typed verbatim by the primary researcher. Once the transcripts were completed, the primary researcher reviewed them to ensure accuracy and assigned each participant a pseudonym (see Table 1 for participant characteristics, including pseudonyms). Participants were sent the transcript of their interview; they were asked to review them and to provide any additions or deletions. None of the participants requested changes.

Data analysis was ongoing throughout data collection and data was analysed using the constant comparative method (Charmaz, 2006). Using this method, comparisons are made at every stage of analysis and at every level (i.e., within interviews and between interviews) in order to find similarities and differences. After each transcript was completed, the primary researcher manually coded the interview using holistic coding or "lumping". This type of coding allowed the researcher to move directly into categorizing the data (Saldana, 2008). For this research, the "lumping" actually began with the design of the interview guide since questions were grouped by categories. The categories were: entry and career in sport, recognition of something being wrong, diagnosis (including reaction and discussion of disclosure), career post diagnosis and advice (to people in sport with mood and/or anxiety disorders and advice to people in sport working with people with mood and/or anxiety disorders). These categories were used in the initial coding of each interview.

For the first interview, after the "lumping" was completed, the primary researcher looked for emerging themes within each category by doing a second round of manual coding using "in vivo coding". This type of coding drew upon the exact language the participant used (Creswell, 2013). Examples of codes that emerged included, "stigma", "being sick" and "I'm an athlete". Using the categories and codes created, the primary researcher began to see themes emerging and then conducted a literature search on these themes. After each subsequent interview, this process was repeated (i.e., "lumping", in vivo coding and then a literature search); however, with each additional interview, statements between interviews were also compared. This allowed the researcher to bracket her own experiences by allowing her to recognize and acknowledge that conclusions were being made based on the participants' experiences as opposed to her own (Charmaz, 2006).

#### **Bracketing**

Recognizing the primary researcher has personal experience with mental illness, has volunteered with several Canadian mental-health related charities and has worked in sport, bracketing was used at various stages of the study. Bracketing is used in order to minimize the risk of biases related to data collection and analysis (Ahern, 1999). At the beginning of each interview, the primary researcher shared her background related to mental health and sport and asked participants if they had any questions. This helped to make participants feel more comfortable (i.e., not feeling judged for having a mental illness). Some participants also expressed that they were happy that they would not have to explain terms related to Canadian sport policy, since the primary researcher was already familiar with them. Throughout the interviews, participants made comments along the lines of, "well you understand, because you probably experienced this" which increased the comfort of the participants, since they were sharing very personal experiences. However, the primary researcher made sure that when comments like this were expressed, she redirected the participants to describe in greater detail what they experienced, in order to ensure that the data reflected their experiences and not her own. Member checking was also employed, as each participant was given the opportunity to review the transcript of their interview to ensure accuracy. Participants were told that they could request any additions or deletions; although, no changes were requested. During data collection and data analysis, the primary researcher engaged in memo writing in order to examine the pre-conceived notions she was bringing to the analysis. This provided her with the opportunity to examine her own thoughts and to be aware of the analysis and findings being driven by the data rather than by her own experiences

#### **Ethics and Informed Consent**

This research was conducted in accordance with the policies and regulations set out under the York University Graduate Student Human Participants Research Protocol. Participants were told that participation was voluntary and could be withdrawn without penalty at any time and all data kept confidential. The participant interviewed face-to-face was asked to sign two copies of the Informed Consent form and was provided with a copy to keep for her records (see Appendix C). Participants interviewed by Skype were e-mailed the form prior to the interview. At the start of the interview, the form was reviewed and oral consent was obtained. Participants e-mailed the signed form to the primary researcher following the interview. The primary researcher signed the form and sent it back, so that both parties had a signed copy.

Given the sensitive nature of the interview, the primary researcher understood that it was possible that participants would need to take a break during their interview or would require support once their interview concluded. At the beginning of the interview, participants were told that they could take a break during the interview or end the interview at anytime if they felt uncomfortable. None of the participants required a break and interviews were completed in one sitting. Additionally, at the end of the interview participants were provided with contact information (i.e., phone numbers, addresses, web addresses) for mental health services in the city they reside in (including distress centres/emergency rooms, peer support organizations and telehealth/distress hotlines)(see Appendix D). This information was provided to participants so they could access support services at the conclusion of the interview, if required.

#### **Results**

The purpose of this research was to explore the experiences of Canadian high performance athletes with mood and/or anxiety disorders, with a specific focus on their journey

through their athletic career. Research questions included: (a) What are the circumstances and processes by which high performance Canadian athletes come to recognize and diagnose their illness?; (b) What are some of the common challenges faced by high performance Canadian athletes?; and (c) What strategies do high performance athletes use to negotiate mental illness and participation in high performance sport? Results are outlined in the following sections: (a) participant characteristics; (b) mental health journey; (c) (not) disclosing diagnoses; and (d) considering improvements in Canadian high performance sport.

#### **Participant Characteristics**

Table 1 presents an overview of participant characteristics. All three participants were female high performance athletes born and raised in Canada. Each participant was enrolled in her sport recreationally by her parents at a young age (Adina was two, Joey was five and Maya was four), and ultimately, became high performance athletes (i.e., competed for positions on Canadian national sports teams) in that sport. However, at age fifteen, a sport similar to the one Joey competed in was named an Olympic sport (her sport was not an Olympic sport), so she changed to that discipline because she was "fascinated with the Olympics" (Joey). Each athlete participated in an individual sport (i.e., they did not compete as a member of a team); although at their career peak, Joey and Maya trained in a group with their peers while Adina trained one-onone with her coach. All three athletes experienced athletic success at a high level. Joey represented Canada at international events (including World Championships) and at two Olympic Games, winning a medal at her first Games and finishing in the top ten in her second; Maya also represented Canada at international events (including World Championships) and two Olympic Games, finishing in the top 35 and top 30, respectively; while Adina competed at an international junior event, was an alternate for her sport's World Junior Championships and

competed in junior and senior Canadian National Championships (winning a medal as a junior and finishing top 30 as a senior). Adina was diagnosed with an anxiety disorder (NOS) and panic attacks at age 12; Joey was diagnosed with MDD, an anxiety disorder (NOS) and OCD at age 25, while Maya was diagnosed with MDD at age 23. At the time they participated in this study, Adina and Joey had retired from competition in the preceding twelve months, while Maya, was returning to competition after taking one year away from sport.

#### **Mental Health Journey**

This study explored the experiences of Canadian high performance athletes with mood and/or anxiety disorders, with a specific focus on their journey through their athletic career. As part of the criteria for participation in the study, each participant was diagnosed, by a mental health professional, with a mood and/or anxiety disorder during their athletic career. Although each athlete came to learn of their diagnoses in a unique manner, findings indicate that participants engaged in a similar process of acceptance (and denial) of their diagnoses. The results suggest that their mental health journey consisted of six steps (outlined in Figure 1): 1) recognizing a problem; 2) receiving a diagnosis; 3) continuing to train/compete; 4) transitioning; 5) taking a break/retirement; and 6) seeking treatment. It is noteworthy that journey fluidity was not always consistent for the three participants. For example, Adina took a one year break from sport two years before her retirement. During her year off, she started treatment, but once she reentered sport she stopped treatment. This suggests that the mental health journey from recognition to treatment was not always a straight line, as in Adina's case, some steps were repeated. It is also important to recognize the parameters of our findings; our results capture the experiences and subsequent journey followed by three high performance Canadian athletes, but do not suggest this is the only path to follow, or necessarily an optimal path for high performance athletes with mood/anxiety disorders. Further, as this study focused on these high performance athletes' experiences throughout their athletic career with a mood/anxiety disorder, findings focus primarily on sport experiences, and do not fully capture athletes' experiences managing their mood/anxiety disorders within broader life contexts.

#### Recognizing a problem, receiving a diagnosis, and continuing to train and compete.

The first step participants described within their journey was recognizing that they had a problem. While each participant came to recognize that there was a problem differently, it is important to note that each participant *did* recognize that there was an issue. Subsequently, each participant had to find out what was causing them to feel the way they were feeling. This led to the second step of the mental health journey - receiving a diagnosis. Once again, *how* they came to receive their diagnosis was unique to each participant. While each participant expressed varying degrees of acceptance of their diagnoses, generally, their behaviour after being diagnosed was very similar, which leads to the third step - continuing to focus on training and competing following diagnosis. While each participant expressed relief upon knowing what was wrong with them, each of the three participants provided similar reasons for placing emphasis on and prioritizing their athletic career over their treating their mental health disorders. While two of the participants attempted some medical treatment (i.e., trying medication, but stopping it when it affected sport performance), all athletes' primary focus remained on sport throughout this phase.

For Adina, at age twelve, it was an accelerated heart rate and chest pain that brought her to the emergency room:

I was sitting at home and I was just staring out the window and I just started feeling like my heart racing, tightness in the chest and my parents obviously did not know what was going on. I mean, twelve years old. So after that, they took me to the hospital because they were worried and the doctor did say that it was just anxiety, but my heart rate was over two hundred or something. Like, it was crazy.

The doctor in the emergency room diagnosed Adina with panic attacks and an anxiety disorder (NOS). After receiving her diagnosis, neither Adina nor her parents elected to treat her illness. At twelve years old, Adina was a promising junior athlete. Two years after her diagnosis (at age fourteen), she achieved her career peak when she medaled at the Canadian junior national championships, competed at an international junior competition and was named an alternate on the Canadian team for the world junior championships. Adina was still not treating her illness because in her words: "you're young, you feel like you are invincible, so you don't even think after awhile (chuckle)." It wasn't until she was sixteen that she even came to understand what having these illnesses meant. At that time, she describes:

It was hard for me to, kind of, do things, like, when I started getting older; it was harder for me to do things on my own because I was nervous like something was going to happen...I didn't really have much motivation. As much as I wanted it, I didn't have that much motivation to do what I needed to do...So, I would say, sometimes I would slack....I would just go through the motions...but my heart wasn't in it, because of my anxiety and I felt down and unmotivated.

Even though she felt this way and even though she had eventually come to recognize some of the challenges and obstacles of her diagnosis of an anxiety disorder and panic attacks, she was hopeful and/or optimistic that this was something that would simply pass. Adina continued to train and compete, while not engaging in any treatment or illness management

because "I was in denial. I thought, like, I was fine and I didn't want help. I wanted to just; I was going to be fine".

While Adina appeared to acknowledge and comprehend the challenges of having an anxiety disorder (i.e., it affected her motivation, made her nervous, and required treatment), she did not change her sport-related behaviour, as she continued to have good results, at least initially, and described sport as her "life". Yet in her own words, retrospectively she suggested that at that time (i.e., between 12-16 years) she was "in denial". Her experiences are not unique to her, as Joey and Maya demonstrated a very similar pattern of behaviour.

Unlike Adina who was diagnosed at twelve years old, Joey was diagnosed at age twentyfive. While Adina described a solitary incident that led to her diagnosis, Joey spoke of feeling sad and anxious for most of her life:

I remember when I saw my medical doctor a few months before [being officially diagnosed]. She could see the way I was acting or reacting... that I was...I had this tendency or was appearing very anxious. And she told me that it might be time to consider the idea of taking anti-depressants and I was beginning to understand why. But then I remember the day where I broke. I called my sports therapist...and I spoke to him and he just, he didn't want to tell me that I was depressed or anything like that, he was just saying I should take time off. Like, he told me maybe I should call my doctor and speak to her. When I went to see my doctor, I just felt so relieved because I felt like I was crazy.

Joey was diagnosed with MDD, an anxiety disorder (NOS) and OCD. At this point in her career, Joey had represented Canada at multiple world championships, had won a silver medal at an Olympic Games and was in the midst of training for another Olympic Games. Also unlike

Adina, Joey says that she understood what her diagnosis meant and claims to have accepted it right away:

I accepted it right away because I knew that, well, I knew that some things were affecting me in a very bad way, like emotionally...I was very happy to see that, that it was okay.

That I need help and that's it. Yeah.

Given what Joey understood about her illness, she did seek some forms of treatment including medication. However, despite Joey's claim that she understood and accepted her diagnosis, her behaviour sometimes suggested otherwise. For example, while she tried medication, she couldn't find one that worked well for her, so she determined she was better (i.e., "I decided that I was perfectly healed") and did not require medication, which she explains retrospectively, "backfired really badly". Yet, even though she told herself she was "perfectly healed", she also continued to discuss how her illness affected her, explaining that she was unmotivated because of her illness:

The only thing that kept me going, which is crazy, was this idea that I absolutely needed to go to the Olympic Games. I still don't understand how that worked because I was demotivated (*sic*) for everything else in my life, but that.

Joey acknowledged that she had been diagnosed with a medical issue, yet she took no time off from sport and other than trying and eventually stopping medication, she continued to train and compete because "[she] wanted to go to the Games" (something she repeated numerous times throughout the interview). Similar to Adina, Joey described understanding she had a medical illness and a lack of motivation, but only engaged in a half-hearted attempt at treatment before ignoring the issue and refocusing solely on training and competition. This is also what Maya described.

Maya was in her twenties when she came to realize that she might have a mental health problem. A few months before her twenty-fourth birthday, Maya remembers:

I was really struggling with my [name of sport redacted] and I was just not coming [improving] and I couldn't figure out why I was feeling that way. Feeling, you know, just absolutely lost and depressed. (Pause) I don't know if I quite knew that I was depressed at that time. When I came home, I went to a sports psych [the sport psychologist employed by her NSO, who worked with her and the group with whom she trained] and I said, "[name redacted] please I would never joke, like this, but I'm afraid I might be a little depressed because I just don't know why I am feeling this way and when I think of the future it just isn't going to get better." And he said, "Well yeah, I mean, maybe, but just think happy thoughts." After a few months, I was like, "[name redacted], I need to go talk to a real psychologist. Because I was like, I'm really just looking into the future and I don't see it...I don't see anything getting better. Ever." And sure enough within 25 minutes [of meeting with a psychiatrist]...is when I finally got that diagnosis. Although it was hard to hear, at least, it was in some respects, it was like you know, I haven't just been imagining this.

Maya's psychiatrist diagnosed her with MDD. Like Joey, although she expressed relief that she hadn't been imagining how she was feeling, Maya initially elected to treat her illness with some talk therapy (i.e., psychotherapy), rather than any medication:

...being, you know, a hard headed athlete, I was like okay, like, I am happy this has been, like medically called to my attention and I don't want to go on medication, like, I will figure this out on my own.

At this point in her career, Maya had competed in many international events and had represented Canada at one Olympics. She received her diagnosis thirteen months before another Olympic Games and since making a second Olympic team was her goal, she focused on that as opposed to treatment. However, several months after receiving her diagnosis and after performing in the World Championships where she described her performance as "so poor...like, it was, like, the worst I could have even imagined", Maya decided that if she hoped to make the Olympics, she would have to go on medication. She also modified the way she was training: "I changed my coach, I changed my training partners, I changed my training program...everything." Even after making the changes and going on medication, she still was not competing at the level that she hoped and when she saw that her chance to make the Olympic team was fading, she went off her medication:

I really only went off the medication because I was like, and who knows, you know, like that was a symptom that might not even have affected me, but I was performing so poorly that I was convinced it was... I was like, I have to get off this

Then, just like Joey, Maya refocused solely on training and competition. As she explained:

I really identified as simply an athlete and I really did not know what to do with myself. So I think there is somewhat of a comfort zone doing the same thing over again, but...looking back at it with the wisdom and perspective that I have been granted with taking a year off...it was a terrible time. Like, there is really no sugar-coating it.

Thus, athletes' emphasis on training and competing only lasted for a finite period of time, after which time athletes experienced a transition, putting their identity as athletes on a backburner, and switching their focus to their illness.

Transitioning, taking a break/retirement, and seeking treatment. The length of time spent in the training/competing phase following diagnosis differed for each athlete, but the shift out of training and competing was preceded by a transition. For Adina, her first transition was due to the beginning of her post secondary education and her second transition was due to two key factors: the end of her post secondary education and the illness of a close family member. For Joey and Maya, this transition coincided with the end of the four-year Olympic cycle. It is worthwhile noting that periods of transition were not performance related. During the transition, each participant made the decision to step away from sport, so they could focus on learning to live with and manage their illness; they felt that they needed to leave sport in order to get healthy again. However, these breaks were not necessarily planned as transitions out of sport (i.e., retirement), although they ended up being for Joey and Adina (after her second transition). Maya, in contrast took one year away from sport, before resuming her athletic career. In the final stage of the journey – seeking treatment (i.e., during the break and/or retirement from sport) athletes engaged in a more dedicated approach to treatment, involving medication and/or talk therapy (i.e., psychotherapy), in the absence of sport-related training or competition.

As noted above, Adina cycled through some of the phases of the mental health journey more than once. Specifically, when Adina started university, she took a one-year break from sport, and found that without the distraction of training and competing, she "actually had to deal with it" (her anxiety disorder). During this year off, her treatment consisted of seeing a naturopath who provided her with natural remedies and some talk therapy (i.e., psychotherapy). Additionally, she added, "I would just try to distract myself more. To try to find things I would enjoy, but it was hard for me to find pleasure in things during that time frame while I was trying to deal with it." When Adina re-entered sport after one year to give her athletic career one final

attempt, she continued with the natural remedies, but stopped engaging in talk therapy (i.e., psychotherapy). As Adina entered into her last year of university, she decided to retire from sport entirely, so she could start preparing for the next phase in her life. At this point, she engaged in a very comprehensive focus to dealing with her anxiety:

I didn't deal with it my whole career. So, now it's like everything came out full-fledged, you know. Yes, I do still suffer from panic attacks. I suffer from anxiety still. I don't feel amazing on a daily basis like some people do. So now, I like, I do go to a psychologist and it's definitely been helping me and I think that is something that has helped me to manage it a little bit better being out of the sport.

While Adina and Joey both progressed through the stages of transition, break/retirement, and treatment, their paths through these stages were somewhat different. Most notably, while Adina made a choice to retire from sport, Joey felt she was forced to retire in order to focus on managing her depression, OCD and anxiety disorder more effectively:

Being mentally ill also made it so much harder to bare physical pain, like usually I would be able to take it and just keep going with a big smile, you know?...so I stopped training. I just have to put a cross on that...I don't have any more ideas of stopping my medication...I was doing psychotherapy...also I have the time to take care of myself and I have the time to do things that I really want to do.

Maya also progressed through these final three stages. At the time of our interview, Maya was returning to sport after taking one year off to focus on getting healthy: "I need to concentrate on my mental health so I can represent myself...to the best of my ability...I worked with a sports psych...and a real-life psychologist, to really work on that mental health." Maya spent her year off engaging in therapy and although she thinks she should have resumed taking medication, she

chose not to. Her hope was that with the year away from sport, when she started competing again she would have the tools to simultaneously be a successful athlete and manage her depression effectively. She spoke to the importance of taking this time away from sport to facilitate the treatment process:

I think we need to remind ourselves that we are human (chuckles). You know, I think that we put athletes on pedestals and we think that they are so infallible and they're larger than life and they can do anything they set their mind to because they train bigger, faster, stronger, you know. And it is just absolutely not the case...I train eleven months out of the year, six days a week, twice a day for about eight hours a day. And that is not a balanced life and it is very easy to have a little bit of a, you know, a hiccup with your mental health. And it goes undiagnosed and we try to solve things on our own.

It was only upon leaving this environment that participants could truly focus on coping, treating, managing and living with their mood and/or anxiety disorders.

#### (Not) Disclosing Diagnoses.

A common theme which emerged from the data was participants' reluctance to disclose their diagnoses to key people within their athletic network. All three participants chose to share their diagnoses with at least one family member, but chose not to share with their peers, while the three differed in whether they shared their diagnoses with their coaches. In describing themselves at the time of their diagnoses, all participants described themselves with terms such as "weak", "shame", "down on myself", "hated myself" and "broken". If participants chose to share their diagnoses, this occurred with different people at different times throughout their mental health journey. In one case, a family member was present during the diagnosis (i.e., Adina's mother), and at other times, participants shared their diagnoses with family members

shortly after receiving them (i.e., in Joey and Maya's case); however, diagnoses were shared with coaches intermittently over time, if and when athletes felt it was appropriate and necessary.

Not disclosing to peers. None of the three athletes chose to disclose their diagnoses to their peers. For Adina, this meant not sharing with her friends who also participated in her sport, while for Joey and Maya, this meant not sharing with athletes in their training groups. When questioned why they did not want their peers to know, Joey said: "I think I didn't want people to feel sorry for me or maybe I thought that telling others or telling them would be a way for them to say to me, you are just feeling sorry for yourself, something." Maya expressed similar thoughts saying, "I didn't want them to think that maybe that this, maybe was a little bit of a cry for attention or something." When asked if they typically shared information regarding physical injury or illness with their peers, there was little consistency across all three participants. Joey did not like to disclose physical injuries to her peers because she felt like talking about any type of injury or illness would seem like complaining and would lead to peers judging her negatively. Maya always shared information regarding her physical well being with her peers as she felt it was important to be honest with her training mates.

Disclosing to coaches: Mixed experiences. The three participants had mixed experiences in relation to disclosing their diagnoses to coaches. Adina chose not to tell her coaches as she felt it was too personal. As she explained, "I felt like it was almost a sign of weakness, like it showed weakness in myself and that it made me, like, my self worth less because I couldn't handle it. And I should be able to handle it!" Joey told her personal trainer/coach about her diagnosis, but she did not tell the NSO coaches for the same reason she did not tell her peers: she didn't want them to think she was just feeling sorry for herself. In Maya's case, the desire to be honest extended to coaches, even though it did not extend to her

peers. She felt that since she was not performing at the level she would have liked, she needed to respect her coaches by explaining to them why. She found this to be a positive choice as this allowed them to provide support to her, specifically by allowing her to leave practices early, so she could see her therapist.

# **Considering Improvements in Canadian High Performance Sport**

Participants felt that the Canadian sport infrastructure was not adequately equipped to support high performance athletes with mood and/or anxiety disorders. Athletes made several suggestions for improvements and offered advice to the community; findings were separated into the categories of systemic changes and education. It is important to note in advance of reviewing this section, that athletes often used the terms psychologist, psychiatrist, and therapist interchangeably. This was noted only when analyzing the data, at which point we followed up with athletes to clarify their intended communication. It became clear at this point, that participants had only marginal comprehension of the training, qualifications, and scope of practice of these different professionals. As such, we provide some interpretation (in parentheses) regarding participants' intended communications.

**Systemic changes.** Participants highlighted systemic changes in two areas: (a) mental health support and (b) improved injury reporting and funding system.

*Mental health support*. Participants all expressed a need for greater access to "sport psychologists" (most likely meaning psychiatrists and therapists) while also acknowledging how difficult this might be due to cost. As Adina said, "I would say actually having a sport psychologist onsite; if not every day because I know it's a little bit unrealistic. Like, at least three times a week or two times a week that people could talk to." Joey also emphasized the importance of psychology (or psychiatry) to every athlete's training program:

They will have sports medicine, physiotherapy, this and that, but they still don't really put any emphasis on sport psychology or just psychology. I think that, I mean if your brain doesn't work properly, how can your body do anything good? I just don't see why it is not automatically built into their yearly program!

Improved injury reporting and funding system. Participants also expressed a need for improvements in the injury reporting and aligning funding system. Specifically, they highlighted issues in recognizing physical injury/illness, but not mental health injuries/illness, and challenges of mentally ill athletes continuing to maintain basic living necessities when not (monetarily) funded. Additionally, they brought to light issues around transparency in the NSOs/Sport Canada's injury reporting system (i.e., faking physical injuries to maintain funding when a training break is required). As Joey pointed out,

When you want to be, like, in those top players, you need financing. You need to compete to go out there and compete and get experience, but you need the financing so you can live. That is everything that people seem to forget, like athletes are actually human beings and they need to live somewhere and pay their bills, right? Like they, there really is not enough funding to be able to guarantee or to make an athlete feel comfortable knowing that if something happens to them, whether that's a mental issue, physical issue, whatever; that they will have a chance they will be supported, they will have a chance to survive without, you know, walking the streets. I'm exaggerating, but I mean, it's really something that made me freak out.

Maya explained some of the 'holes' in the injury reporting system. Specifically, when a high performance athlete becomes physically injured or ill, they can maintain funding, but if an athlete chooses or requires a break from training (i.e., for mental health reasons), funding is cut

off. As such, "so many athletes after the Olympics will fake an injury...so they don't actually compete, but they keep their funding". Although Maya had a real illness, she maintains that she wanted to take her break with integrity, according to regulations, but as such, lost her funding (and her position on the Canadian National Team):

I know that I am not, you know, I know that I am not physically injured, but I need this break because my brain has an injury. I mean I have struggled with depression this entire year...it just frustrated me in the sense that, if I had said, I pulled my hamstring or I have shin splints, or you know, any kind of physical injury, they would have given me an injury bye or an injury card, but because it was a mental health injury, like, it is just not even...it is really not discussed.

She outlined how as she starts training again, she must re-earn her spot on the National team, and her funding, suggesting this was a clear example of the lack of institutional support from her NSO/Sport Canada, for her mental illness. As participants highlighted the type of institutional changes they would like to see implemented, they also emphasized the need for the creation and implementation of educational programs related to mental health.

**Education.** Participants called for improved education around mental illness within high performance sport (e.g., within NSOs). Specifically, it was suggested that: (a) sport environments work to be mental-health friendly and stigma-free; (b) there be improved visibility, understanding, and utilization of psychologists, psychiatrists, and therapists; and (c) that more athletes share their stories.

Mental health friendly / stigma-free sport environments.

As Maya outlined:

I think that first and foremost establishing, a you know, an NSO or an environment that is mental health or pro mental health, mental health friendly. I think that the more we discuss this situation, the more it will grow into, you know, an acceptable discussion that is shedding the stigma of you're weak if you struggle with depression or anxiety or bipolar. So furthering the discussion.

Adina also expressed the need for a mental health positive environment, free from stigma because athletes will be better able to recognize the need for help: "I think going to someone when you notice signs and symptoms and that...you need to do that. It is the first step."

Visibility, understanding, and utilization of psychologists, psychiatrists, and therapists. The participants felt one way of encouraging athletes to take that first step was increasing access to psychologists, psychiatrists, and therapists, and providing education so that athletes and coaches knew what the signs and symptoms of mental illness looked like and that they come to feel it is okay to ask for help from a psychologist, psychiatrist, or therapist:

I also think that telling athletes or re-affirming to athletes that they have options to see mental, you know, like psychologists outside of their NSO. I think that is really important. Just to have that option and to really break down that barrier that going to see a psych...going to see a therapist is not...it does not make you weak. (Maya)

This was particularly important, as the participants in this study did not initially fully comprehend the different training, qualifications, and scope of practice of the health professionals available to them. It took some time before they recognized that "sport psychologists" worked on "sport psych", "mental preparation", and "being mentally strong when competing", but did not provide therapy; athletes needed to be connected with psychiatrists/therapists from the Canadian Sport Institute to be diagnosed and seek appropriate

treatment/therapy. The need for this education has to come from the top (that is, the NSOs and Sport Canada). Maya put it best when she said, "I think that NSOs can do a much better job of re-affirming that athletes do have options and mental health is nothing to be taken lightly, you know. It's serious!"

Athletes' shared stories. Finally, participants felt that educational programs might also lead to another positive consequence: more athletes coming forward and sharing their experiences with depression and/or anxiety. Being Olympians, Joey and Maya have higher profiles in Canada than Adina, which also translates to more media exposure. Eventually, with time, both participants chose to share their stories with the media. They felt this was a positive experience and helped in their recovery, "It made me happy because some people contacted me to say, 'Well thank you for talking about it; it makes me feel more confident talking about my illness.' I just felt like it was, I felt like it was healing." (Joey) They felt that if speaking publicly had been healing for them, it could also be healing for other athletes, while also helping to reduce the stigma associated with these illnesses in and out of the Canadian sport community.

#### **Discussion**

Although the perception that high performance athletes cannot become mentally ill has been discredited (e.g., Baum, 2005; Dean & Rowan, 2013; Markser, 2011; Reardon & Factor, 2010), little is known about how mental illness is managed by high performance athletes.

According to Statistics Canada (2013), MDD and anxiety disorders are the most common mental illnesses in the country and although prevalence rates in high performance athletes are not known, recent research and anecdotal accounts reinforce that high performance athletes suffer from these illnesses (e.g., FoxSports Ohio, 2009; Fish, 2015; Hughes, 2015; Marino, 2013; Stroumboulopoulos, 2012). Thus, this study explored the experiences of Canadian high

performance athletes with mood and/or anxiety disorders, with a specific focus on their journey through their athletic career. Below, we first discuss novel findings surrounding the mental health journey of participants. This is followed by an exploration of the intersection of stigma and athletic identity among high performance athletes following their diagnosis. Finally, we conclude by outlining some preliminary implications for the sport community and sport policy, emerging from our findings. Throughout, we discuss the strengths and limitations of this study, as well as future research directions within this area.

#### The Mental Health Journey

This study is the first to consider the journey of high performance athletes diagnosed with mood/anxiety disorders during their athletic career. While the experiences of the three athletes in this study differed in many regards, their experiences aligned with regard to a six-stage trajectory: 1) recognizing a problem; 2) receiving a diagnosis; 3) continuing to train/compete; 4) transitioning; 5) taking a break/retirement; and 6) seeking treatment. If at stage five, athletes took a break (rather than retired), it appeared (i.e., in Adina's case) that athletes would cycle through stages three to six again.

Inherent within the criteria for participation in this study was that all participants had a diagnosed mood or anxiety disorder, thus, they have inevitably gone through the first two steps of the journey – recognizing a problem and receiving a diagnosis. In Canada, most patients are diagnosed with mood and anxiety disorders by their family physicians/general practitioners and most family physicians/general practitioners feel confident in their ability to accurately diagnose and treat mood and anxiety disorders (Fleury, Imboua, Aubé, Farand, & Lambert, 2012). However, it is likely that recognition of a problem remains a barrier to many high performance athletes' navigation through a successful athletic career. As outlined in the literature review,

issues surrounding mistaken beliefs and perceptions about mental illness within the culture of sport (Begel, 1994; Linder et al., 1991; Reardon & Factor, 2010), coupled with a definition of mood/anxiety disorders that requires impairment to an individual's life (DSM-5, American Psychiatry Association, 2013) may lead to a failure to recognize a problem or diagnose an illness, as these criteria may not resonate as clearly in high performance sport as in other life contexts.

It is also important to note the obstacles that athletes encountered between the recognition of a problem, and receiving their diagnosis. Specifically, athletes appeared trapped in a system of sport and health professionals; while each professional had a specific role, these distinct roles were not always clear to the athletes, nor were there necessarily supports available to directly address mental health issues. Most telling was Maya's experience when she expressed to her NSO's sport psychologist that she felt she was depressed, she was told to "think happy thoughts" and dismissed. This is further discussed below within the implications section.

The third phase of athletes' journey involved their continued training and competition with their diagnoses. While athletes made some attempts to engage in treatment (i.e., medication, talk therapy), priority was eventually always given to their sport performance, which resulted in abandonment of treatment (i.e., going off medication). Noteworthy at this stage is that while traditional forms of treatment were abandoned, sport appeared to serve as a non-traditional form of treatment for athletes, as it provided focus and motivated athletes to get out of bed and engage with their environment each day. While physical activity has been highlighted as an effective form of treatment for depression (Babyak et al., 2000), further research is necessary to examine the specific parameters of (high performance) competitive sport as a context to treat individuals

with mood/anxiety disorders. This issue is further discussed below in the context of athletes' identity.

Also noteworthy within the third stage was athletes' decisions regarding disclosure of their illness to their peers and coaches. Typically, athletes did not disclose to their peers, but in some cases, they did disclose to their coaches. Future research is necessary to better understand how this may affect athletes' decisions surrounding disclosure, and how athletes' disclosure of their illness may affect subsequent stages of their mental health journey. Social context must also be considered in future research, as it is possible that as more athletes come forward to share their stories, that stigma surrounding mental health will evolve. These findings are further discussed below in the section on stigma and athlete identity.

Subsequently, athletes moved through the transition, sport break/retirement, and treatment phases. Participants described how they required time away from sport (whether it be a break or retirement) in order to treat and learn to effectively live with their mental illness.

Despite a lack of empirical research, this pattern appears to align with the journey of many other high performance athletes who have spoken publically about their journey (e.g., Canadian Olympian Clara Hughes, Canadian tennis player Rebecca Marino, American tennis player Mardy Fish, MLB player Joey Votto, MLB player Zach Grenkie, Canadian Olympian Gillian Carleton, Canadian hockey player Kendra Fisher, Canadian UFC fighter Georges St. Pierre and American basketball player Larry Sanders). However, it is not known whether these athletes chose to leave sport after a transition as the athletes in the current study did. Therefore, empirical research is needed in order to learn more about the circumstances in which high performance athletes leave sport to treat their mood and/or anxiety disorder.

Another interesting finding emerging from these stages warranting further exploration is the apparent dichotomy in athletes' treatment trajectories. On the one hand, these high performance athletes discussed the requirement for them to leave their sport in order to seek comprehensive treatment; yet on the other hand, sport appeared to serve as a form of treatment for these high performance athletes during their training and competition phase. As minimizing removal from sport is likely the preferred trajectory of most high performance athletes, further research is necessary to explore if and how athletes can successfully navigate treatment options, while maintaining optimal training and performance results. Finally, tied into these final phases of athletes' trajectory complexities, were challenges in negotiating NSO/Sport Canada guidelines around illness and funding, which are discussed below in the implication section.

## **Stigma and Athletic Identity**

Stigma and athlete identity were two pervasive concepts that transpired across the stages of athletes' mental health journeys. Stigma, the "negative connotations and false assumptions connected with" (Overton & Medina, 2008; p. 143) mood and anxiety disorders includes perceptions that the disorders are self-induced, and therefore, people who have them are weak, unstable and dangerous (Corrigan & Watson, 2002; Hayward & Bright, 1997). Results from this study suggest that participants were victims of stigma, particularly perceived stigma and self-stigma. Perceived stigma is the individual's belief that they will be treated based on the negative stereotypes associated with their illness, whereas self-stigma is the internalization of stigma leading people to believe the negative stereotypes associated with their illness are true (Corrigan, 2004; Mittal et al., 2012).

First, participants' desire to keep their illnesses hidden from peers/coaches was influenced by perceived stigma (i.e., they did not want to be seen as weak or as attention

seeking). It is likely that perceived stigma was tied to self-stigma. Participants used words like "weak", "shame", "down on myself", "hated myself" and "broken" to describe themselves, thereby illustrating that they had internalized the stereotypes associated with mood and anxiety disorders. Previous studies have found that stigma related to mental illness may cause decreases in help-seeking behaviours, thus limiting athletes' adherence to treatment plans, and further reinforcing participants need to keep their diagnoses secret - three behaviours that were demonstrated by participants in this study (Link, Mirotznik, & Cullen, 1991; Mittal et al., 2012). However, findings in this study suggest participants only connected stigma to decisions around disclosure; thus, if stigma played a role in limiting athletes' health-seeking behaviours or adhering to treatment, participants were likely unaware of this influence. Interestingly, even though participants elected not to share their diagnoses with peers, and in some cases coaches (at least initially), if they did eventually share their diagnoses, none of the participants described behaviour where they were judged because of stigma; in fact, they were commended for their honesty and openness.

It is possible that one of the reasons participants did not explicitly make a connection between stigma and their behaviour related to seeking help and adhering to treatment plans is because athletic identity, not stigma, was influencing their behaviour. Athletic identity, the degree to which an athlete identifies as an athlete (Brewer, Cornelius, Stephan, & Raalte, 2010), was not a focus of this study, but was outlined by participants as a factor in staying motivated post diagnosis. For example, Maya explicitly stated that her choice to continue competing and training was because she identified as an athlete, "I really identified as simply an athlete and I really did not know what to do with myself. So I think there is somewhat of a comfort zone doing the same thing over again..." It appears that at a time of upheaval in their lives (i.e.,

receiving a diagnosis related to their mental health), participants needed to maintain normalcy (which for them involved training and competing) and stay true to the way they primarily identify themselves: as an athlete first and foremost.

Although there is limited research on athletic identity and mental illness, previous research has found that high rates of athletic identity can cause negative effects on adjustment after injury and in retirement (Brewer, 1993; Grove, Lavallee, & Gordon, 1997; Manuel et al., 2002; Webb, Nasco, Riley, & Headrick, 1998); however results from this study, as well as evidence from popular culture, suggest that athletic identity and continued participation in high performance sport may actually help athletes cope with depression and anxiety. As previously noted, Joey and Maya emphasized the importance of making the Canadian Olympic team as an incentive when they felt hopeless and unmotivated. Similarly, American Olympic Gold Medalist Greg Louganis said, "...the diving was much more of a positive thing to focus on. I did suffer from depression. If we had a day off, I couldn't get out of bed. I would just pull the covers over my head" (Ain, 2016). Finally, Canadian Olympian Gillian Carleton also spoke of using her desire to compete in the Olympics to help cope with depression: "In the past year, it's taken everything I have just to get out of bed in the morning. Without the promise of 2012's London Olympics on the horizon, my motivation to do anything, but hide from the world all day is at an all time low" (Carleton, 2013). Although it is unclear how athletic identity and continuing to participate in sport helps high performance athletes cope, it seems that continuing to train may have been a form of treatment since it helped to keep athletes motivated and getting out of bed in the morning.

Issues around disclosure of diagnoses also tie into athletes' identity. Previous studies have identified peers, coaches and media as playing a role in the development and maintenance

of athletic identity (e.g., Brewer at al., 1993; Stephan & Brewer, 2007). In this study, it is likely that participants did not want to have these groups mirror back the stigmatized view of mental illness (e.g., "you are weak"; "you are just looking for attention"), but instead, were determined to maintain their identity as an athlete; thus providing rationale for keeping their diagnoses hidden. Collectively, our interpretations around stigma and athletic identity highlight the need to learn more about the relationship between stigma, athletic identity, mental illness, continued sport participation and motivation. In turn, intervention programs and evaluation research could be designed and implemented to expand athletes' identity to other areas, which may help athletes to cope more effectively with depression and anxiety.

## **Considerations for Sport Communities in Canada**

Finally, we conclude by outlining some preliminary implications for the sport community and sport policy emerging from our findings. Evidently, limitations - and strengths - of the study must be considered when reflecting upon these suggestions.

Given the lack of research on high performance athletes with mood and anxiety disorders, this study is one of the first to provide insight into the mental health journey experienced by high performance athletes and how they balance being a high performance athlete while coping with stigmatized conditions like mood and anxiety disorders. It is also important to note the richness of the stories that the athletes shared. The insider status of the primary researcher (i.e., her history of mental illness and connection to the Canadian sport system) increased the comfort level of participants. This, along with the assurances of confidentiality, created an open and honest environment, without fear of judgment, allowing for the discussion of an issue that is often not spoken about in sport (i.e., mental illness). Finally, the fact that the participants had achieved high levels of success in their sport of choice provided great insight into how the

characteristics of high performance sport may influence mental health, both at the junior and senior level.

However, there are limitations, which need to be considered. First, all three participants were female, so we do not know how the journeys of male athletes may be similar or different from those shared in the study. There is anecdotal evidence from popular culture (e.g., Greg Louganis, Joey Votto, Georges St-Pierre) that suggests there are similarities, but more research is required before any conclusions may be drawn. Second, all three participants competed in individual sports, so it is not known how competing in a team sport may help or hinder athletes with mood/anxiety disorders. It is possible that having teammates helps to mitigate some of the challenges of the journey. It is equally possible that having teammates might create challenges that athletes in individual sports do not have to contend with. Future research will need to explore this. Finally, this study was a retrospective study that relied on self reports of experiences. Memories can become fuzzy over time and may not accurately reflect what was experienced (Menard, 2008). Additionally, no data was collected on the experiences of peers, coaches, family members, doctors or therapists. Future research should seek to learn about the experiences of these key people (i.e., coaches, peers, family members, doctors) in order to create a more complete picture of an athlete's mental health journey.

Although the small number of participants in this study may be considered a limitation, it is possible that the number of participants is representative of the population. It is currently unknown what the prevalence rates of mood and anxiety disorders are in Canadian high performance athletes; therefore our findings may in fact be generalizable within the restricted parameters we used (i.e., the definition of high performance athletes and the requirement to have been diagnosed by a mental health professional while still competing). However, given that the

participants in this study had chosen to publicly disclose their illnesses, it is possible that athletes who have chosen not to disclose their illness have different experiences. It is important to keep this in mind when considering our suggestions to changes in sport policy.

Clarity of roles within the network of sport and health professionals. As noted above, it appears that high performance athletes were sometimes lost within a network of sport and health professionals. Specifically, athletes used the term "sport psychologist" interchangeably with "psychologist" and "therapist", apparently unaware that sport psychologists generally provide consultation on improving athletic performance (Gulliver et al., 2015; Linder, Brewer, Raalte, & Lange, 1991), while psychologists and therapists are specifically trained to offer mental health care, including diagnoses and treatment (e.g., therapy/counselling) of mental illness (CMHA, n.d.a.). In the current study, when participants spoke of the importance of visiting "sport psychologists", they were actually referring to psychiatrists, psychologists and therapists. Blurred distinctions between sport psychologists and psychiatrists, psychologists, and therapists have also been found in previous research. For example, in their study on the mental health of Australian elite athletes, Gulliver et al. (2015) found a high proportion of their participants spoke of seeing a psychologist while a low number of participants spoke of seeing a psychiatrist. They attribute this to the fact that athletes were likely reporting seeing a sport psychologist for performance issues as opposed to a psychologist for mental health issues. The confusion between these terms can partly be blamed on the discipline itself: often times it depends too much on the fields on which it is based (e.g., psychology, physical education, etc.), thereby leading people to wonder if sport psychology is geared towards performance enhancement or therapy for athletes (Aoyagi, Portenga, Poczwardowski, Cohen, & Statler, 2012). It is important that this confusion is addressed so that athletes with mood/anxiety

disorders are matched to the appropriate services. As was noted in Maya's case, where she was told by her sport psychologist to "think happy thoughts" when expressing concern that she may be depressed; this clarification of distinctive roles is particularly important in assuring initial diagnoses are attained within a timely fashion.

Sport policies: Increased access, education, and training. Findings from this study also suggest changes are required within Canadian sport policy in order to address the mental health needs of high performance athletes. Athletes outlined the need for improved access and subsequent normalization to psychologists and education programs, to in turn reduce the stigma associated with mood and anxiety disorders and in using the services of a therapist as well as how to recognize the signs/symptoms of mood and/or anxiety disorders in oneself and in other people.

Participants spoke of the need for greater access to psychologists. Although high performance athletes have access to psychologists via the Canadian Sport Institutes, participants felt more athletes would use these services if they were more accessible or if they were made a mandatory part of their training program. Studies have highlighted the "negative halo effect" associated with athletes who seek out the support of sport psychologists for performance issues (Kamm, 2005; Reardon & Factor, 2010); this effect in conjunction with the stigma associated with mood and anxiety disorders may be stopping some athletes from seeking assistance or may be the reason why some athletes delay help seeking behaviours.

Although an announcement was made in September 2015 that Canadian high performance athletes would have access to internet based mental health resources, including services related to education and awareness through a program called "Game Plan", as of June

2016, the program was still in development and it was unclear what resources would actually be available (J. Brown, personal communication, June 16, 2016; Heroux et al., 2015).

Research from a pilot study among Australian elite athletes suggested that internet based resources were adequate for reducing stigma and increasing knowledge related to mental illness, but did not increase the probability that athletes would seek help for mental health related issues (Gulliver et al., 2012). However, in their study on Australian coaches, Mazzer and Rickwood (2015) reported that coaches acknowledged the importance of being able to identify mental health issues in athletes; partly so they could act as facilitators to seeking help. In Canada, coaches are not required to engage in any type of mental health training (Coaching Association of Canada, 2014). Collectively, these findings suggest that an internet-based education and awareness program designed for athletes and coaches may help to decrease stigma, increase understanding of mental illness and increase help seeking behaviours. As part of its carding program, Sport Canada requires high performance athletes complete an "online anti-doping module at the beginning of every carding cycle" (Public Works and Government Services Canada, 2015, p.3-2), therefore we recommend that modules related to mental health be made a mandatory requirement to receive funding. We also recommend that completion of mental health related modules be made mandatory in order to earn coaching certification in Canada. Future studies should look to design and test the efficacy of on-line modules in order to develop the most effective learning materials for athletes and coaches.

Recognizing mental health and providing funding continuity. Finally, findings from this study suggest that NSOs/Sport Canada need to provide greater support (i.e., financial and resources) to athletes with mood and/or anxiety disorders. Current Sport Canada policy does not address mental illness directly, however when high performance athletes are going to miss an

event due to "injury or other legitimate reason", they must notify their NSO immediately and provide a letter of support to the NSO from their physician within three weeks (Public Works and Government Services, 2015, p. 6). Additionally, high performance athletes that miss more than four months of training must provide Sport Canada with a written statement from a doctor that they will be able to return to training and competing within eight to twelve months. High performance athletes do have access to psychiatrists/psychologists/therapists through Canadian Sport Institutes. However, although the costs associated with visiting psychiatrists are covered by provincial health plans, costs for visiting psychologists/therapists are not (CMHA, 2016; Canadian Psychological Association, 2016).

Given that athletes in this study as well as athletes who have shared their story publicly required breaks of different lengths of time from sport to address their mental health issues (for example, Canadians Rebecca Marino, Gillian Carleton and Georges St-Pierre) and given the nature of treating mental health issues compared to physical injuries/illness, it is recommended that Sport Canada create a policy that specifically addresses time off required for mental illness, so that athletes can be honest about their needs and not fear a loss of carding (i.e., funding) during their time off.

Currently, as part of the agreement between an athlete and an NSO, athletes, on a yearly basis, are required to submit a year round training plan that is consistent with the NSOs long-term athlete development program (Public Works and Government Services Canada, 2015). According to the participants in this study, there was no requirement to include any type of mental training or mental health checks into their training plan. Additionally, athletes are required to have a check-in with an NSO physician (or equivalent) while injured and after injury to ensure they are physically able to train and compete again (Public Works and Government

Services Canada, 2015). A simple change to these rules requiring a mandatory yearly check-in with a mental health professional to ensure athletes are not experiencing any mental health issues (as well as a check in with a mental health professional after injury/illness) will help to demonstrate that Sport Canada and NSOs acknowledge the importance of mental health. Further, if every athlete is required to have a mental health check up this may reduce the negative halo effect usually experienced by athletes seeking help from psychologists (i.e., if everyone is required to visit a psychologist, the stigma associated with these services may be reduced). Once this rule is implemented, research can examine if it does lead to the reduction of the negative halo effect and if athletes feel their mental health is being better supported.

## **Summary and Conclusion**

As high performance athletes continue to come forward to share their experiences with mood and anxiety disorders, it is increasingly important to understand how high performance athletes cope with these illnesses and how the sport community may best provide support. Our study was one of the first to highlight the mental health journey experienced by high performance athletes. This journey consisted of six different steps, starting with recognition of a problem, receiving a diagnosis, continuing to train/compete, transitions, taking a break from sport/retirement, and ending with, treatment. Participants reported continuing to train and compete after they received their diagnoses while simultaneously attempting some form of treatment. However, treatment was soon abandoned, especially if it conflicted with sport performance. Participants described focusing on treatment and learning to live with a mood and/or anxiety disorder only after retiring from sport or taking a temporary leave. Our study suggested that stigma and athlete identity influence the journey, so it is important that we continue to gain an understanding of how this influence works in order to ensure the best

possible outcomes for high performance athletes. Finally, our study found a need for a more mental health friendly environment from the top (i.e., NSOs/Sport Canada) down. Mandatory education and awareness programs related to mental health, for athletes and coaches, are good first steps, but considerations must also be given to increasing access and funding for mental health professionals. Ultimately, changes to sport policy and education for the sport community will likely help to ensure that Canadian athletes receive the support they need, so that they are not forced to leave sport to regain their mental health.

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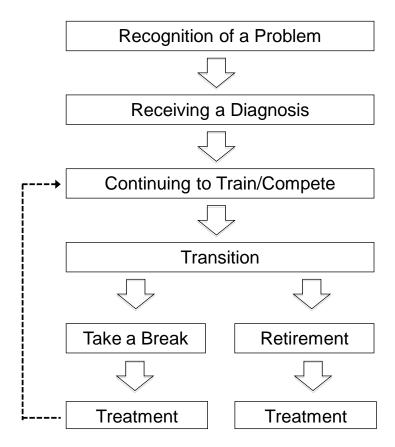
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**Table 1: Participant Characteristics** 

Name*	Adina	Joey	Maya
Sex	Female	Female	Female
Start Age in Key Sport	2	4	5
		(15 in similar	
		Olympic sport)	
Sport Type	Individual	Individual	Individual
Highest Competition	Junior World	Olympic Games	Olympic Games – top 35
Level and Performance	Championships -	– medalist	Olympic Games (4 years
	Alternate	Olympic Games	later) – top 30
	Senior Canadian	(4 years later) –	
	National	top 10	
	Championships – top		
	30 (Final Not		
	Reached)		
Age of Diagnosis	12	25	23
Diagnosis	Anxiety Disorder	MDD; Anxiety	MDD
	(NOS)**;	Disorder	
	Panic Attacks	(NOS)**; OCD	
Age of First (Post-	17	29	25
Transition) Treatment	(Second transition		
	came with one year		
	left in university)		
Current Status at Time of	Retired (Less Than	Retired (Less	Active (Returning to Sport
Data Collection (2015)	12 Months)	than 12 Months)	After 1 Year Break)

<sup>\*</sup> All names are pseudonyms \*\* NOS – Not otherwise specified

Figure 1: Mental Health Journey



## Appendix A

## (Recruitment Letter)

Dear (Name of Athlete),

My name is Lauren Dickler and I am a Masters student at York University in Toronto, Ontario under the supervision of Dr. Jessica Fraser-Thomas.

My Masters research seeks to explore the experiences of high performance Canadian athletes with mood and/or anxiety disorders. It is my hope that this research will help to develop the understanding of the challenges faced by high performance athletes with mood and/or anxiety disorders, help to reduce stigma associated with mental illness and be used to help shape mental health related policy in sport.

I am contacting you because you have publicly discussed your mental health and I am hoping you will be willing to participate in this important study. Participants will be asked to participate in a taped interview that will last approximately 60 minutes, but no longer than 120 minutes. Interviews with participants located in the Greater Toronto Area (GTA) can be conducted at the location of their choice or at York University. For participants not located in the GTA, the interview can be conducted via telephone or Skype. All identifying information will be kept confidential (including, but not limited to, participant names and the sport participants play).

In order to qualify for this study:

- 1) Participants must have received funding from a Canadian National Sport Organization at some point during their athletic career or must have competed at a National level;
- 2) Participants must have been diagnosed with a mood and/or anxiety disorder by a mental health professional (i.e., doctor, psychiatrist, psychologist, social worker, etc.) while they were still competing (i.e., they must have not been diagnosed in retirement) although they may now be retired

Thank you for taking the time to consider my request. With your help, we can work to reduce stigma and educate Canadians on mental illness. If you know anyone who would be interested in participating in the study, please have them contact me at <a href="mailto:ldickler@yorku.ca">ldickler@yorku.ca</a> or at 416-995-0641.

I look forward to hearing from you.

Yours truly,

Lauren Dickler MA Candidate York University Toronto, Ontario

#### Appendix B

#### **Interview Guide**

#### 1. Introductions

Thank you

I want to thank you for taking the time to meet with me today

Introduce myself

My name is Lauren and I would like to talk to you about your experiences with a mood and/or anxiety disorder

#### *Introduce the purpose of the study*

The purpose of this study is to gain an understanding of the experiences of high performance Canadian athletes with a mood and/or anxiety disorder.

Your feedback will provide insight into understanding what it is like to be a high performance athlete with a mood and/or anxiety disorder.

# Tape recording

This interview is being digitally recorded because I don't want to miss any of your comments. I will also be taking some notes during the session.

## Duration of the interview

This interview will take about an hour. If at any point, you feel you need a break, please let me know and we can stop the interview.

#### Consent Form and Confidentiality

Before we start the interview, I want to review the Consent Form. As a reminder, any information I include in my report will not identify you as a respondent. You don't have to talk about anything you don't want to and you may end the interview at any time.

#### *Opportunity for questions*

Do you have any questions so far?

2. Tell me about yourself and the sport you play (played)

#### **Prompts**

- How did you get started?
- Tell me about your progress through the Canadian sport system.
- 3. At what age and what year were you diagnosed with a mood and/or anxiety disorder?
- 4. What was the diagnosis?
- 5. Who diagnosed you? *Prompts*

- Personal physician? Team physician? Psychologist accessed via Canadian Sport Centres?
- 6. You said you were diagnosed in (fill in year). Can you take me through the process leading up to your diagnosis?

#### Prompts:

- How did you feel emotionally/mentally/physically?
- You said (fill in based on answer to #5) diagnosed you. What was the purpose of your appointment with him/her? Annual physical? Pre-season physical? Generally feeling unwell?
- During this time, did the way you were feeling affect your training/competing? How?
- Were there any changes to your relationships with your coach/teammates?
- 7. Once you received the diagnosis of (fill in diagnosis), how did you react?

## Prompts:

- Acceptance/denial?
- Did you tell people right away? If so, who? If not, why?
- Continue competing in your sport? Take a break? Why did you make this decision?
- What were you expecting to hear was wrong with you?
- 8. How did the diagnosis influence your experiences as an athlete initially, and over time?

#### Prompts:

- How did you manage your symptoms?
- Did you face any challenges in training?
- Did you face any challenges in competing?
- How did you navigate recognizing and managing triggers?
- Did treatment (for example, medication, therapy) provide any challenges?
- Did you face any challenges in training/competing?
- How did you navigate these challenges?
- Do you feel the experience changed you? How?
- 9. When you were told the diagnosis, how did it influence the way you saw yourself?
- 10. When you told people about your diagnosis, how did they react?

#### Prompts:

- Coaches
- Teammates
- Fellow Competitors
- Media
- Sponsors
- Fans

11. What are you currently doing to manage your (fill in the blank with diagnosis)?

## Prompts:

- (For those who are retired) how has the management changed since you are no longer actively competing?
- 12. What do you think people in sport need to know about working with athletes with mood and/or anxiety disorders?

#### Prompts:

- Coaches
- Teammates
- Administrators
- 13. What services/resources were helpful in your recovery?

#### Prompts:

- Canadian Sport Institute? Team physicians? Private health care providers?
- What services/resources would have been helpful?
- 14. What advice would you give to other athletes who might be struggling with mood and/or anxiety disorders?
- 15. Closing Remarks

I want to thank you for your time today. You insights will be valuable in helping us gain a better understanding of being a high performance athlete with a mood and/or anxiety disorder.

Do you have any questions for me?

Is there anything else you would like to add?

Again, thank you for participating in the interview. If you feel that you want to add anything, please feel free to contact me.

# Appendix C

#### **Informed Consent Form**

# Exploring the Experiences of High Performance Canadian Athletes with Mood and/or Anxiety Disorders

**Researchers**: Lauren Dickler, Master of Arts Candidate, Chemistry Building, Room 158, 4700 Keele St. Toronto, ON, M3J 1P3, <u>Idickler@yorku.ca</u>, 416-995-0641; Dr. Jessica Fraser-Thomas, Assistant Professor, Norman Bethune College, Room 350,4700 Keele St. Toronto, ON, M3J 1P3, <u>ift@yorku.ca</u>, 416-736-2100 x20952.

**Purpose of the Research:** This research will explore the experiences of high performance Canadian athletes with mood and/or anxiety disorders. It seeks to understand how mood and/or anxiety disorders are recognized and diagnosed in high performance athletes and to understand the common challenges faced and how high performance athletes work to overcome them.

What You Will Be Asked to Do in the Research: Engage in a semi-structured interview about your experiences as a high performance Canadian athlete with a mood and/or anxiety disorder. It is estimated that the study will require approximately 60 minutes of your time.

**Risks and Discomforts**: We do not foresee any risks or discomfort from your participation in the research.

Benefits of the Research and Benefits to You: While there are no direct benefits of participation, it is expected that you will enjoy sharing your experiences with a researcher interested in this field of study. Findings of this study will provide insight into the experiences of high performance Canadian athletes with mood and/or anxiety disorders, which may contribute to mental health related policy in the Canadian sport system.

**Voluntary Participation**: Your participation in the study is completely voluntary and you may choose to stop participating at any time. Your decision not to volunteer will not influence the nature of the ongoing relationship you may have with the researchers or the nature of your relationship with York University either now, or in the future.

Withdrawal from the Study: You can stop participating in the study at any time, for any reason, if you so decide. Your decision to stop participating, or to refuse to answer particular questions, will not affect your relationship with the researchers, York University, or any other group associated with this project. In the event you withdraw from the study, all associated data collected will be immediately destroyed wherever possible.

**Confidentiality**: Unless you choose otherwise, all information you supply during the research will be held in confidence and unless you specifically indicate your consent, your name and any

identifying characteristics will not appear in any report or publication of the research. The data will be collected using a digital recording device and handwritten notes. Your data will be safely stored in a locked facility and on a password protected computer and only the primary researcher and her supervisor will have access to this information. Data will be filed for four years and will subsequently be destroyed (handwritten notes will be shredded and digital recordings will be erased). Confidentiality will be provided to the fullest extent possible by law.

Questions About the Research? If you have questions about the research in general or about your role in the study, please feel free to contact Lauren Dickler (telephone 416-995-0641, or email <a href="mailto:ldickler@yorku.ca">ldickler@yorku.ca</a>) or her supervisor Dr. Jessica Fraser-Thomas (telephone 416-736-2100, ext. 20952, or email <a href="mailto:jft@yorku.ca">jft@yorku.ca</a>). This research has been reviewed and approved by the Human Participants Review Sub-Committee, York University's Ethics Review Board and conforms to the standards of the Canadian Tri-Council Research Ethics guidelines. If you have any questions about this process, or about your rights as a participant in the study, please contact the Sr. Manager & Policy Advisor for the Office of Research Ethics, 5<sup>th</sup> Floor, York Research Tower, York University (telephone 416-736-5914 or e-mail <a href="mailto:jore@yorku.ca">jore@yorku.ca</a>).

Legal Rights an	d Signatures:		
understood the n	es with mood and/or anxiety of atture of this project and wish g this form. My signature belo	disorders conducted by to participate. I am no	ot waiving any of my legal
<u>Signatur</u> Participa		<u>Date</u>	
<u>Signatur</u> Principal	re Investigator	<u>Date</u>	

# Appendix D

# **Mental Health Support Services**

Thank you for agreeing to participate in the research study, "Exploring The Experiences Of High Performance Canadian Athletes With A Mood And/Or Anxiety Disorder".

If after your interview, you find that you need support, please reach out to someone.

Here is a list of mental health services you can access in the Greater Toronto Area:

- 1) If you find yourself in an emergency situation, please call 911
- Centre for Addiction and Mental Health (CAMH)
   College Street site (CAMH's Emergency Department)
   250 College Street (College and Spadina)
   Toronto, Ontario
   M5T 1R8
- 3) Telehealth Ontario (speak to a registered nurse; available 24 hours) 1-866-797-0000
- 4) Toronto Distress Centres (available 24 hours) (416) 408-4357 or 408-HELP
- 5) Gerstein Centre (mental health crisis support; available 24 hours) 416-929-5200
- 6) Mood Disorders Association of Ontario (web resources and free peer support groups) http://www.mooddisorders.ca/
- 7) Anxiety Disorders Association of Ontario (web resources) <a href="http://www.anxietydisordersontario.ca/">http://www.anxietydisordersontario.ca/</a>