

Exploring Flourishing in Canadian University Sport

by

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## Abstract

The overall purpose of this dissertation was to explore flourishing among Canadian university student-athletes and coaches. This was addressed via three studies. The purpose of the first study was to investigate mental health protective and risk factors among flourishing Canadian university student-athletes over the course of their sport season. Pre- and post-season interviews were conducted with six flourishing women student-athletes, who also kept weekly written diaries of their experiences in-season. Interpretative phenomenological analysis methodology (Smith et al., 2009) was used. Results demonstrated that these flourishing women student-athletes took a range of approaches to protecting or promoting their flourishing at different stages of the season. In the pre-season they took time to build their flourishing. In-season was dedicated to maintaining their flourishing. In the post-season, the participants described taking time to re-invest in their flourishing. The purpose of the second study was to investigate how flourishing Canadian university sport coaches protected and promoted their flourishing. Individual retrospective interviews were conducted with seven flourishing men who were head or associate head coaches of their university sport team. Data analysis again followed recommendations from Smith et al. (2009) for interpretative phenomenological analysis. Results demonstrated that these coaches acted in ways that supported their personally created principles in order to protect or promote their flourishing. Three principles were evident among the participants: balance, personal growth, and making a difference. The purpose of the third study was to identify how flourishing can be promoted through coach-athlete relationships in Canadian university sport. Interviews were conducted with 10 current or former student-athletes, six coaches, three former student-athletes who went on to coach, two administrators, one athletic therapist, and one sport psychology practitioner. Data analysis followed Miles et al.'s (2019)

recommendations for pragmatic qualitative research in order to generate a process map. Results demonstrated that flourishing through the coach-athlete relationship began with the creation of shared goals between the student-athlete and coach. Then, the student-athlete and coach took on different roles in the pursuit of goal-oriented growth. The student-athlete was responsible for learning about available resources and engaging with them, while the coach provided, taught about, and gave the student-athlete time to use the resources. If the student-athlete and coach recognised goal-oriented growth, they would experience flourishing outcomes. This process was facilitated by the coach athlete relationship as well as other individual, relational, and environmental facilitators. Together these studies demonstrate that flourishing in sport is a complex process involving a range of intra- and interpersonal factors. This research can be used to inform policies and programs aimed at improving mental health outcomes for student-athletes and coaches.

## Preface

This dissertation is an original work by Kurtis Pankow.

Chapter 2 of this dissertation has been published as Pankow, K., McHugh, T-L. F., Mosewich, A. D., and Holt, N. L., “Mental health protective factors among flourishing Canadian women university student-athletes,” *Psychology of Sport and Exercise*, vol. 52. I was responsible for conceptualisation, methodology, analysis, investigation, data curation, writing – original draft, writing – review & editing, project administration, and funding acquisition. The co-authors assisted in conceptualisation, methodology, and writing – review and editing. N. L. Holt was also responsible for supervision. This study received research ethics approval from the University of Alberta Research Ethics Board, Project “A Qualitative Season-Long Investigation of Flourishing Canadian University Student-Athletes,” ID: Pro00091372.

Chapter 3 of this dissertation has been accepted as Pankow K., Mosewich, A. D., McHugh, T-L. F., and Holt, N. L., “The role of mental health protection and promotion among flourishing Canadian university sport coaches,” *Sport, Exercise, and Performance Psychology*. I was responsible for conceptualisation, methodology, analysis, investigation, data curation, writing – original draft, writing – review & editing, project administration, and funding acquisition. The co-authors assisted in conceptualisation, methodology, and writing – review and editing. N. L. Holt was also responsible for supervision. This study received research ethics approval from the University of Alberta Research Ethics Board, Project “The development of flourishing among Canadian university sport coaches,” ID: Pro00096680.

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analysis, investigation, data curation, writing – original draft, writing – review & editing, project administration, and funding acquisition. The co-authors assisted in conceptualisation, methodology, and writing – review and editing. N. L. Holt was also responsible for supervision.

## **Dedication**

This dissertation is dedicated to the memories of Ashton J. Dickson and Mario G. La Valle. One was an excellent teammate, the other an excellent coach. But, most importantly, both were role models, mentors, and friends.

## Acknowledgements

As my research has found, it is not possible to flourish without the support of others. I am fortunate to have had an excellent support network throughout my time here. To Dr. Nick Holt, thank you for taking a gamble on me all those years ago, and for giving me both support and opportunities for personal and professional growth. To Dr. Amber Mosewich and Dr. Tara-Leigh McHugh, thank you for your guidance and affirmations. To the members of the CASA lab that have been part of my journey, and especially Colin and Shannon who have been there every step of the way for two degrees, thanks for living by the motto, “teamwork makes the dream work.” Thank you as well to Chris Morris, Brent Korte, and all the coaches, support staff and student-athletes I have worked with through Golden Bears Football for your ongoing support and for giving me a place to *not* be an academic for a few hours every week. I would also like to thank my grandparents, extended family, and friends for your constant and ongoing support of me no matter where in the world I end up. Finally, thank you to my parents, Mark and Theresa, and my brothers, Bryan and Patrick, for being role models, allowing me to be curious, being a sounding board for my personal and professional life, and loving me unconditionally.

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## Glossary of Terms

***Flourishing:*** “To be filled with positive emotion, and functioning well psychologically and socially” Keyes, 2002, p.210).

***Mental health:*** “Mental health is a state of well-being in which an individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community” (WHO, 2018, paragraph 2).

***Well-being:*** “Individuals’ perceptions and evaluations of their own lives in terms of their affective states and their psychological and social functioning” (Keyes, 2002, p. 208).

## **CHAPTER 1. Introduction**

## Introduction

Mental health (MH) is more than the absence of mental illness. MH is a state of well-being (WB) in which individuals are happy or content, feel confident in themselves, can navigate challenges of day-to-day life, and contribute to their communities (WHO, 2018). Researchers have explored MH in this manner utilising Keyes' (2002) dual-continua model of MH. Keyes' model may be particularly relevant to enhancing MH in sport settings, where participants may face a range of challenges and stressors that impede MH but may not result in clinical mental illnesses (Sherwin, 2017; Uphill et al., 2016). In fact, much of the extant sport psychology research has focused on the prevention of mental illness, which has resulted in a collectively limited understanding of MH *promotion* at any level of sport (Küttel & Larsen, 2020). This is particularly troubling, as sport governing bodies like USports (2018) advertise the importance of MH among their student-athletes, but there is little empirical evidence to support policies and programs aimed at promoting and protecting student-athlete MH. Likewise, coaches are instrumental in the delivery of university sport programs, but there is little evidence to guide supports for the promotion and protection of their MH. Therefore, the overall purpose of this dissertation was to explore flourishing among Canadian university student-athletes and coaches.

### Flourishing

Flourishing is a broad term that has been used in multiple ways. Aegnor et al. (2017) identified four models of flourishing that are widely used in psychology research. These are Huppert and So's flourishing (Huppert & So, 2013), Diener et al.'s (2010) model of psychosocial flourishing, Seligman's (2011) positive emotions, engagement, positive relationships, meaning, and accomplishment (PERMA) model of flourishing, and Keyes' (2002) dual continua model of mental health. Conceptually, all the models define flourishing as some combination of positive

experiences and functioning (Aegnor et al., 2017). The models have four common attributes (meaning in life, positive relationships, engagement, competence), with three of the four models having an additional two attributes in common (positive emotion and self-esteem).

***Huppert and So's Flourishing.*** Huppert and So (2013) proposed a model of flourishing based on a comment in Keyes' (2007) work, where Keyes noted that research in WB had revealed clusters of symptoms that resembled mirror opposites of the symptoms of depression outlined in the Diagnostic and Statistical Manual of Mental Disorders. Huppert and So (2013) gathered a group of three psychologists and one lay person to generate words or phrases in 'simple English' that the group believed were the mirror opposite of 10 diagnostic criteria for depression and anxiety. Huppert and So's model of flourishing included dimensions of competence, emotional stability, engagement, meaning, optimism, positive emotions, positive relationships, resilience, self-esteem, and vitality. These criteria were then defined based on matching the simple English term with extant items on the European Social Survey. A measure of Huppert and So's model was published in 2020 (Marsh et al., 2020), meaning evaluations of this model are in the early stages.

***Diener et al.'s Model of Psychosocial Flourishing.*** Diener et al. (2010) proposed a model of psychosocial flourishing to assess "social-psychological prosperity" (p. 144). Their model consists of dimensions of purpose and meaning, supportive relationships, engagement, contribution to others, competence, self-respect, optimism, and feeling respected by others. Theoretical justification for these specific dimensions was not provided. Diener et al. argued that their measure provided a good overview of psychological WB based on convergence of summed scores with other established measures of psychological WB, but noted that their scale did not adequately provide insight into the specific dimensions of their model (i.e., purpose and

meaning, supportive relationships, engagement, contribution to others, competence, self-respect, optimism, and feeling respected by others). The authors recommended that additional scales or measures should be used to assess the dimensions in depth.

***Seligman's PERMA Model of Flourishing.*** Seligman (2011) proposed a model of flourishing WB in a trade book publication for a general (i.e., non-academic) audience. He proposed that flourishing consisted of positive emotions, engagement, positive relationships, meaning, and accomplishment. Seligman then co-authored a review of theories of WB (Forgeard et al., 2011) that relied heavily on the trade book to create a theoretical justification for the PERMA model. A measure of PERMA was published in 2016 by Butler and Kern. High self-reported levels of PERMA have been associated with higher grades, work opportunities following graduation, and lower psychological distress among American university students (Coffey et al., 2016). Critics have argued that the PERMA model lacks solid theoretical justification and that the model is too highly correlated with extant measures of subjective WB to contribute new information to research in WB (Goodman et al., 2018).

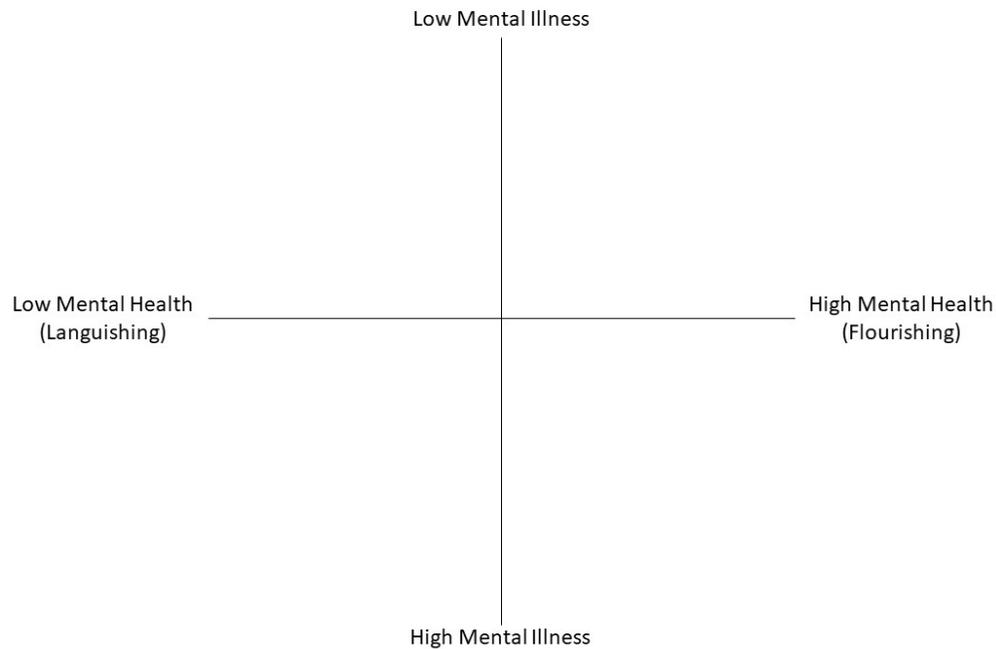
***Keyes' Dual Continua Model of Mental Health.*** Keyes' (2002) flourishing was adopted as the theoretical lens for MH in my dissertation research. Keyes (2002) proposed a dual-continua model of MH where MH and mental illness are related but separate constructs. Keyes called 'complete' MH flourishing, which he defined as being "filled with positive emotion, and functioning well psychologically and socially" (2002, p. 210). Keyes developed the construct of flourishing when he recognised that hedonic traditions of WB (e.g., emotional WB or positive affect; subjective WB) and eudaimonic traditions of WB (e.g., psychological WB; social WB) were often studied separately, but each demonstrated positive correlations with functioning in daily life. Therefore, Keyes' flourishing represents a union of emotional or subjective WB along

with Ryff's (1989) conceptualisation of psychological WB and Keyes' (1998) social WB in order to provide a complete picture of the contributions of different traditions of WB to an individual's positive functioning. Of the four major models of flourishing, Azenor et al. (2017) stated that Keyes' was the most widely used and had the most thorough and transparent explanation of the theoretical foundations and justifications of the model (which may explain its use).

Keyes (2002) outlined 13 symptoms or indicators of flourishing. These indicators are two dimensions of emotional WB (i.e., happiness or life satisfaction), six indicators of psychological WB from Ryff's (1989) work (i.e., autonomy, self-acceptance, positive relations with others, purpose in life, personal growth, environmental mastery) and five dimensions of social WB from his own (Keyes, 1998) work (i.e., social acceptance, social actualisation, social contribution, social coherence, social integration) that together represent the degree to which individuals perceive they are flourishing. The opposite of flourishing is not mental illness, but languishing. Although distinct from clinical depression, languishing manifests in a similar way (Keyes, 2007), and has been described as feeling hollow, empty, and devoid of purpose (Keyes, 2002). Those who are neither flourishing nor languishing are considered moderately mentally healthy. Keyes' flourishing considers fewer dimensions of intrapersonal (or psychological) WB than the other models, but is the only one to assess feelings or attitudes towards larger social groups (rather than solely interpersonal relationships). It is important to note that unlike related concepts such as thriving, Keyes' flourishing (which will be referred to as simply flourishing for the remainder of this dissertation unless otherwise specified) is not contingent on an individual's performance relative to others but is a subjective appraisal of experiences that are thought to collectively represent complete MH (i.e., Brown et al., 2018).

## Figure 1

### *The Dual-Continua Model of Mental Health*



Keyes has used two measures of flourishing. Keyes initially used the Mental Health Continuum (Keyes, 2002; 2005a), which combined Mroczek and Kolarz's (1998) six items of positive affect (cheerfulness, good spirits, extreme happiness, calm and peaceful, satisfied, and full of life), Ryff and Keyes' (1995) 18 item measure of Ryff's (1989) psychological WB, and Keyes' (1998) 15 item measure of social WB. Due to the number of items, Keyes sought to develop a robust short scale to assess flourishing. This resulted in the development of the Mental Health Continuum-Short Form (MHC-SF; Keyes, 2005b; 2009a; Keyes et al., 2008). The MHC-SF consists of 14 total items. Three represent emotional WB, six represent psychological WB, and five represent social WB. To be considered flourishing individuals must feel that every day or almost every day they are experiencing one of the dimensions of emotional WB and six of the remaining 11 dimensions of psychological and/or social WB. An individual who reports never or almost never experiencing any of the dimensions of flourishing is considered languishing. The

MHC-SF has been found to have relatively high internal consistency, and good criterion validity when compared to other related measures (Keyes et al., 2008). Research using the MHC-SF has found the three-factor model of flourishing (i.e., emotional, psychological, and social WB being distinct factors) demonstrates a high goodness of fit and the highest goodness of fit compared to single- and two-factor models (i.e., emotional WB as a measure of hedonic WB, and psychological and social WB loading onto a single factor of eudaimonic WB) (Keyes, 2005a; 2005b; Keyes et al., 2008). Keyes (2009a) recommended use of the MHC-SF over the long form version for future research.

A recurring theme in Keyes' work, and a central implication of the dual-continua model, is the notion that MH promotion and mental illness prevention are complimentary but distinct goals (Keyes, 2002; 2007; 2009b). Keyes' (2002) initially argued that because MH is more than the absence of mental illness, but the presence of indicators of positive functioning, it was unlikely that programs aimed at preventing mental illness would be able to impact the indicators of MH. Keyes has repeatedly argued for more research into understanding the promotion and protection of MH as flourishing in order to achieve policy goals laid out by the National Institute of Health and other policy leaders (Keyes, 2007). Keyes' argument in this regard has been empirically supported by systematic reviews of research exploring MH among elementary, junior high school, and high school students (Wells et al., 2003), and post-secondary students (Conley et al., 2013). These reviews found that strengths-based approaches to MH promotion result in higher levels of MH than programs aimed at reducing or preventing instances of mental illness. Despite the evidence in support of the dual-continua model, researchers, clinicians, and policy makers alike have continued to focus their efforts on the prevention of mental illness without giving due consideration to complementary strategies that may promote MH.

Much of the extant research examining flourishing largely looked at correlates related to health and activity in American adults and youth (Keyes, 2002; 2006; Keyes et al., 2010; 2020; Keyes & Simoes, 2012). Flourishing has been associated with greater ease in activities of daily life, fewer missed working days, and lower all-cause mortality among adults when compared to adults with moderate or languishing MH (Keyes, 2002; Keyes & Simoes, 2012). Flourishing adults are also less likely to experience a mental illness in general (Keyes, 2002), and are less likely to develop mental illness over time (Keyes et al., 2010). Individuals who are flourishing or improve their MH to flourishing are less likely to experience instances of depression when compared to individuals who do not experience flourishing MH in a six-month period (Keyes et al., 2020). Population levels of flourishing appear stable although individual levels or experiences of flourishing may fluctuate over time (i.e., an individual may promote their MH to flourishing from moderate or languishing or an individual may experience a drop in their MH from flourishing to moderate or languishing, but the overall number of flourishing individuals remained relatively constant; Keyes et al., 2010). In order to improve flourishing, Keyes (2002; 2007) has proposed that researchers need to understand strengths and actions of flourishing individuals to create evidence-informed MH promotion programs and policies.

Research has demonstrated that deliberate engagement in prosocial behaviours can promote flourishing in as little as one week (Nelson et al., 2016), and flourishing individuals report more enjoyment in daily activities such as physical activity and sport compared to those with moderate or languishing MH (Catalino & Fredrickson, 2011). In fact, flourishing individuals are more likely to create meaningful goals in their work and build relationships for mutual support and learning opportunities when compared to languishing individuals, who are more likely to view their work as a source of income and form relationships with the intent of

receiving support (Wissing et al., 2019). An important consideration arising from the extant literature is that both relationships, and meaningful activities in different domains of life can contribute to flourishing (Catalino & Fredrickson, 2011; Wissing et al., 2019).

### **Mental Health and Well-Being in Athletes**

Sport is an important domain of life for athletes and coaches (e.g., Chen et al., 2010; McLean & Mallett, 2012). Given the impact of experiences in important domains on global flourishing, it is therefore prudent for researchers to investigate the role of sport in participants' MH. Unfortunately, researchers have identified numerous MH-related challenges related to participation in sport. A review of research among elite athletes found that there are more individual and systemic MH risk factors known to researchers than protective factors, and the authors noted that dual career athletes (e.g., student-athletes, who must balance the important domains of academic and athletic life) may be at increased risk for MH challenges (Küttel & Larsen, 2020). Indeed, university student-athletes have reported rates of depressive symptoms of between 21% in the United States (Yang et al., 2007) and 61% in Canada (Hammond et al., 2013). Other research has found that Canadian university student-athletes may experience episodes of anxiety, loss of identity, and psychological distress (Jewett et al., 2019). In fact, Canadian student-athletes have reported twice the levels of psychological distress of other non-athlete university students, and 20% reported levels that are of clinical concern (Sullivan, Blacker, et al., 2019). Together, this stream of research indicates that university student-athletes face numerous mental health challenges that can present barriers to flourishing.

Researchers have taken notice of the range of MH challenges faced by athletes, which has resulted in several position statements, commentaries, and the development of the Canadian Centre for Mental Health and Sport (e.g., Henriksen et al., 2020; Poucher et al., 2021; Schinke et

al., 2018; Van Slingerland, Durand-Bush, Bradley, et al., 2019). In fact, there have been so many such statements that there has even been a systematic review of MH in sport statements published recently (Vella, Schweickle, et al., 2021). Each of these statements, however, repeat the same core mistake that Keyes (2002; 2007; 2009b) identified with national MH service models in the United States: Despite the stated goal of promoting MH in sport, these statements and initiatives are largely focused on actions to prevent mental illness, treating MH promotion as a secondary outcome of mental illness prevention. It stands to reason that the extant statements represent recommendations that may achieve an important goal and help prevent or reduce mental illness among athletes. However, each of the statements have in fact recognised that MH is the presence of positive functioning (Vella, Schweickle, et al., 2021). Considering the strength of the evidence for the dual-continua model and MH as the presence of positives related to but separate from mental illness (Keyes, 2002), and that mental illness prevention strategies are ineffective at MH promotion in educational settings (i.e., Conley et al., 2013; Wells et al., 2003), these initiatives may lack the necessary depth and content to address the authors' stated goals of offering *mental health* promotion in and through sport. Evidence is needed to ensure that there is a strong base to inform future complementary policy suggestions and position statements that will address this gap and aim to focus on MH promotion.

As in other domains (e.g., Agenor et al., 2017), research in sport has used flourishing in different ways, or avoided the term altogether despite studying the dimensions of flourishing. For example, a 2011 review by Lundqvist identified that WB in sport was inconsistently defined, and proposed a model of global and sport-domain WB using the 13 dimensions of Keyes' (2002) flourishing without naming it flourishing. Other research has used the term flourishing to describe Ryff's (1989) psychological WB in the context of sport (Ferguson et al., 2019), or as an

open-ended term for athletes to define (Ashfield et al., 2012). Some researchers have begun using Keyes' model of flourishing in sport settings among athletes. Approximately 46% of Canadian student-athletes are flourishing, with no significant differences coinciding with independent variables such as experience (Van Slingerland, Durand-Bush, & Rathwell, 2019). Furthermore, studies examining flourishing or its dimensions (i.e., emotional, psychological, and social WB) have identified that flourishing is highly related to team embeddedness, and that athletes report sport flourishing as more volatile than global flourishing (Lundqvist & Sandin, 2014; Stander et al., 2017). In the development of a measure of sport-domain flourishing, Foster and Chow (2019) found that sport flourishing was highly related to, but did not entirely predict, global flourishing among American university student-athletes. These studies provided an important foundation for future work examining flourishing in sport, such as exploring athletes' experiences of sport and global flourishing over a season.

### **Mental Health and Well-Being in Coaches**

MH is an emergent area of study among coaches and appears to have received comparatively less attention in the literature than the MH of athletes. However, stress, coping, and to a lesser extent WB, have been explored much more to date (Norris et al., 2017). This research has revealed that coaches face stressors stemming from inadequate work-life balance and the pressures of athlete performance. Coaches may not have the appropriate coping resources to navigate these stressors, and have been found to use maladaptive coping strategies such as avoidance coping (Norris et al., 2017). In the emergent literature examining coach WB, coaches who perceive an adequate work-life balance and support in their job report higher levels of WB than those without (Norris et al., 2017). Coach WB has been positively correlated with athlete WB in these studies. In qualitative studies of coach WB, researchers have identified that a lack of

autonomy was negatively related to psychological WB, and that personal growth and positive relationships with others were seen as contributing to coaches' psychological WB (Potts et al., 2021). Social WB has yet to be examined among coaches, and, as Potts et al. noted, few studies have deliberately examined coach WB beyond affective states. As a combination of emotional, psychological, and social WB, flourishing is a useful construct to address this concern.

Much of the extant research on coach MH has focused on MH literacy (i.e., knowledge and attitudes related to mental health and illness; Gorczynski et al., 2020) and the coach's role in offering MH support to athletes. In the UK and Canada, men coaches and sport staff have lower rates of MH literacy than their women colleagues, and lower intentions to seek help for MH challenges (Gorczynski et al., 2020; Sullivan, Murphy, et al., 2019). In a review, Bissett et al. (2020) argued that coaches should support athlete MH by creating a supportive team environment, encouraging care-seeking, and supporting athletes currently seeking care. Although this research represents an important area, the coach's role in promoting their own MH remains unknown and an important area for future research.

A special issue of the *International Journal of Environmental Research and Public Health* published in September 2020 was entirely dedicated to MH and WB in the sport workforce. Many of these studies focused on coaches, and findings were reasonably consistent with previous research on coach stress and WB. For example, studies found that increases in job insecurity during a season among paid coaches was correlated with reductions in measures of vitality and work satisfaction (used as a proxy for psychological WB) and higher levels of exhaustion and cynicism (Bentzen et al., 2020), and younger coaches who struggled to manage their workload were found to have lower levels of mental WB (Carson et al., 2019). Other research in the issue identified that 55% of coaches in the UK reported having had a mental

illness at some point in their lives, with coaches at lower levels more likely to report experiences of mental illness than their elite peers (Smith et al., 2020). However, as with the literature regarding coach MH literacy and their role in supporting athlete MH, researchers have yet to conduct in-depth examinations of MH promotion among coaches.

### **The USports Context**

This dissertation is focused on the context of Canadian university sport, or “USports”. USports boasts over 21,000 student-athlete and coach participants annually (USports, 2020a), and advertises the benefits of sport participation for student-athletes as a central feature of their organisation. For example, USports’ vision statement is “to provide exceptional experiences which empower today’s student-athletes to be tomorrow’s leaders” (USports, 2018, p. 6), and they have advertised on their webpage that USports participation leads to the development of psychosocial competencies that can help student-athletes with employment when their playing careers end (e.g., Peric, 2021). Researchers have shown that USports student-athletes perceive that they develop psychosocial competencies through their university sport participation (Rathwell & Young, 2018a), and coaches intentionally develop these competencies (Rathwell & Young, 2018b). However, as previously noted, Canadian university student-athletes face a range of MH challenges, and only approximately 46% are flourishing (Van Slingerland, Durand-Bush, & Rathwell, 2019). Furthermore, only 54% of Canadian coaches at any level of sport are flourishing, with lower levels represented among paid (e.g., USports) coaches (McNeill et al., 2018). Given that these rates are substantially lower than the Canadian population average of 77% (Gilmour, 2014), it is important to consider how USports experiences might be leveraged to improve MH.

USports' Mission is to provide "outstanding environments and opportunities for student-athletes to achieve their full academic and athletic potential" (USports, 2018, p. 6). To this end, they have adopted MH guidelines from the NCAA "to provide Canadian university and college athletics and sport medicine departments with recommendations and guidelines for supporting and promoting student-athlete mental health" (USports 2020b, p. 3). A review of the guidelines reveals that each of the four suggestions are aimed at mental illness prevention, rather than MH promotion. Even the fourth guideline, titled *Encourage sporting environments that support mental wellness and resiliency*, lacks depth regarding how these environments might support and promote *mental health* and instead focuses on environments that reduce stigma surrounding mental illness. These strategies are undoubtedly important; however, as discussed previously in this introduction, it is unlikely such guidelines will achieve the stated goal of supporting and promoting student-athlete MH when the recommended behaviours and actions are focused on a different goal (i.e., mental illness prevention).

A further consideration is that of coach MH in USports. Coaches are not immune to challenges and stressors in their work (Norris et al., 2017; Potts et al., 2021) and many have reported poor mental health (McNeil et al., 2018; Smith et al., 2020). Although coaches play a vital role in USports and part of the current strategic plan is to help more coaches pursue long-term development (USports, 2018), coaches are not recognised in the organisation's MH guidelines (USports, 2020b). As research has demonstrated a positive correlation between coach WB and athlete WB (e.g., Stebbings et al., 2016), it appears worthwhile to explore ways in which coach MH may be promoted due to the potential positive impact on both the athlete and coach.

## **Purpose and Overview of Studies**

Flourishing is an important construct in the study of MH. Individuals' overall levels of flourishing can be promoted through important domains of life, such as sport. However, much of the extant research examining MH in sport has not provided a theoretical perspective on MH (Vella et al., 2021b) and little is known about how sport or other domain experiences might impact flourishing both at domain and global levels. Furthermore, it is evident that despite the best intentions of researchers and practitioners, researchers have made recommendations that have focused on the reduction of mental illness in their pursuit of MH recommendations. These are, as discussed, complementary but distinctly separate goals (Keyes, 2002; 2007; 2009b). In fact, it appears there is an absence of evidence, policy, and programming regarding MH promotion at any level of sport. Considering the low rates of flourishing among USports student-athletes and paid coaches in Canadian sport, USports is an appropriate setting to begin this work. **Therefore, the overall purpose of this dissertation was to explore flourishing among Canadian university student-athletes and coaches.** Three studies were conducted focusing on different aspects of flourishing in the USports context.

**Study 1.** Athletes have reported that their emotional, psychological, and social WB in sport can fluctuate across training sessions, but that their global WB remained relatively stable (Lundqvist & Sandin, 2014). Likewise, research has demonstrated that flourishing is a state, not a trait, that can change in as little as one week (Nelson et al., 2016). However, it is not understood how flourishing athletes experience the interactions of MH protective and risk factors over the course of a sport season. Therefore, *the purpose of the first study was to investigate MH protective and risk factors among flourishing Canadian university student-athletes over the course of their sport season.* This study adopted an interpretative phenomenological analysis

(Smith et al., 2009) methodological approach to understand how flourishing women university student-athletes experienced different factors of their sport season using a longitudinal design.

**Study 2.** Little attention has been paid to coaches' experiences of WB and MH (Norris et al., 2017; Potts et al., 2021), and many sport psychology practitioners report feeling under equipped to offer assistance to coaches (Kelly et al., 2018). Therefore, *the purpose of the second study was to investigate how flourishing Canadian university sport coaches protected and promoted their flourishing.* This study adopted an interpretative phenomenological analysis (Smith et al., 2009) methodological approach to identify strategies used by Canadian men university sport coaches to protect and promote their flourishing using a retrospective design.

**Study 3.** Studies 1 and 2 demonstrated that student-athletes and coaches play a role in protecting and promoting each other's MH. Little is known about the role of non-romantic relationships in any area of positive psychology, including MH and flourishing (Gable & Maisel, 2019). It is prudent to examine potential processes through which flourishing can be promoted in the coach-athlete relationship given that the coach-athlete relationship is a vital component of positive sport experiences (Jowett & Shanmugam, 2016), and researchers have found that flourishing individuals perceive important relationships as sources of reciprocal learning and support (Wissing et al., 2019). Hence, *the purpose of the third study was to identify how flourishing can be promoted through coach-athlete relationships in Canadian university sport.* This study followed a pragmatic qualitative methodological framework in order to generate a process map (Miles et al., 2019) that offered an interpretation of the promotion of flourishing in the coach-athlete relationship in Canadian university sport.

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## CHAPTER 2. Study 1

### **Mental Health Protective Factors Among Flourishing Canadian Women University Student-Athletes**

A version of this chapter has been published:

Pankow, K., McHugh, T-L. F., Mosewich, A. D., & Holt, N. L. (2021). Mental health protective factors among flourishing Canadian women university student-athletes. *Psychology of Sport and Exercise*, 52, 1-9. <https://doi.org/10.1016/j.psychsport.2020.101847>

## **Mental Health Protective Factors Among Flourishing Canadian Women University Student-Athletes**

Mental health (MH) is a state of well-being in which individuals can realise their own potential, cope with the normal stresses of life, work productively and fruitfully, and make contributions to their community (WHO, 2018). MH is also an important resource that helps athletes realise their potential and navigate challenges associated with their athletic careers (Küttel & Larsen, 2020). However, research has shown that Canadian university student-athletes face a range of MH challenges, such as high rates of psychological distress (Sullivan et al., 2019) and depressive episodes (Hammond et al., 2013). There is a need for research examining factors that protect MH among student-athletes, who may face challenges balancing the demands of school and sport (Küttel & Larsen, 2020). Flourishing, part of the two-continua model of MH (Keyes, 2002) is a salient construct for exploring MH among athletes as it may allow a lens for understanding the MH assets of athletes regardless of their experiences of mental illness (Uphill et al., 2016).

In an effort to identify the MH challenges faced by Canadian student-athletes, Sullivan et al. (2019) issued a clinical screening measure designed to assess psychological distress and indicate the need for intervention to 284 student-athletes ( $n$  women = 179). Participants completed the measure once, either during the pre-season, in-season, post-season, or off-season stage. Women student-athletes reported higher mean scores of psychological distress than men, and athletes who were not starters (regardless of gender) reported higher mean scores of psychological distress than those who were starters. Participants who completed their assessment in their pre-season reported the highest levels of psychological distress, followed by post-season, off-season, and in-season. Sullivan et al. reported that the overall mean distress scores for

student-athletes were higher than previously reported for the general student population. Another study with 50 Canadian university swimmers ( $n$  women = 22) preparing for the national championship found that 68% reported a major depressive episode in the previous 36 months, and women athletes experienced significantly higher rates of depression than men (Hammond et al., 2013). Following competition, 34% of participants reported a major depressive episode, with 22% reporting mild depression and 4% reporting moderate depression. The findings of these studies suggest it is important to understand more about factors that protect and promote student-athletes' MH across different time points.

In a recent scoping review, Küttel and Larsen (2020) examined 43 studies of MH and well-being (WB) among elite athletes. A total of 10 protective factors and 15 risk factors were identified. These were further classified as sport environmental factors or personal factors. Sport environmental protective factors included positive relationships in sport and a positive sport climate. Personal protective factors included positive social relationships and support and protective behaviours (e.g., self-reflection, self-discipline). Sport environmental risk factors included a lack of social support, sport-specific stressors (e.g., sport performance pressure), and personal risk factors included injury and ineffective coping. Notably, only 16 of the 43 studies included in this review investigated factors that protect athlete MH, with the majority reporting on mental illness or MH risk factors. In particular, Küttel and Larsen highlighted a lack of research explicitly investigating MH protective and risk factors among dual-career athletes (which includes student-athletes, who need to balance academic and athletic careers). Küttel and Larsen also noted the need to explore temporal dimensions of MH in sport to better understand the needs of athletes at different stages of their season.

I used Keyes' (2002) construct of flourishing as the theoretical lens for the current study, which may be useful for helping sport psychology researchers and practitioners to improve our understanding of athlete MH and provide better interventions and services (Uphill et al., 2016). Flourishing is part of the dual-continua model of MH. One continuum represents the presence or absence of mental illness, and the other represents the presence or absence of MH. Flourishing is the presence of MH, defined as being "filled with positive emotion, and to be functioning well psychologically and socially" (Keyes, 2002, p. 210). Flourishing consists of 13 dimensions. Two represent emotional WB (i.e., satisfaction with life and positive affect). The remaining 11 factors are Ryff's (1989) six dimensions of psychological WB (i.e., autonomy, environmental mastery, personal growth, positive relatedness, purpose in life, self-acceptance) and Keyes' (1998) five dimensions of social WB (i.e., social acceptance, social actualisation, social coherence, social contribution, social integration). The opposite of flourishing is languishing (an absence of emotional, psychological, and social WB), and those who are neither flourishing nor languishing are moderately mentally healthy. Flourishing has been associated with greater ease of daily activities of life, lower rates of mental illness, and lower all-cause mortality when compared with languishing and moderate mental health in a sample of over 3,000 American adults (Keyes, 2002; Keyes & Simoes, 2012).

The strength of Keyes' model for athletes lies in the fact that individuals are able to flourish while experiencing a diagnosis of mental illness, or may be languishing without a diagnosable mental illness. This understanding would allow for practitioners to support the development of MH protective factors, rather than focus solely on mental illness reduction (which may involve different strategies). For example, flourishing and the dual-continua model may provide insight into strengths of athletes like Michael Phelps, who dominated the world

stage despite a mental illness diagnosis (Küttel & Larsen, 2020). Examining and promoting flourishing may also help athletes who were overlooked by traditional MH initiatives (i.e., those focused on mental illness reduction) to receive meaningful support programs. In fact, researchers have argued that using flourishing as an approach to athlete MH may increase athletes' MH protective factors as well as reduce instances of mental illness and improve mental illness recovery (Uphill et al., 2016). It is therefore important to understand the MH protective and risk factors of flourishing athletes in order to inform future programs.

In a review of WB literature concerning elite athletes, Lundqvist (2011) proposed a model of emotional, psychological, and social WB that mirrored the dimensions of Keyes' flourishing. Lundqvist claimed that because sport is an important domain of life for elite athletes, their overall WB (i.e., global) would be influenced by their experiences in sport (i.e., sport WB is separate but related). In a subsequent study, Lundqvist and Sandin (2014) explored the psychosocial factors that 10 elite orienteers ( $n$  women = 4) reported as necessary for promoting and maintaining their WB over the course of their sport careers. This study demonstrated a number of global and sport-specific WB resources that were important to the participants' perceived WB (e.g., close relationships with family, rest and recovery) that may, due to the connection between Lundqvist's (2011) and Keyes' (2002) models, also be important for athlete MH. However, it is important to understand when and how these resources might be used by athletes to protect and promote their MH.

Foster and Chow (2019) developed the Sport Mental Health Continuum – Short Form (Sport MHC-SF) to assess levels of flourishing within the sport domain. This is based on Keyes' Mental Health Continuum – Short Form (MHC-SF; Keyes, 2009). Foster and Chow conducted a confirmatory factor analysis of the Sport MHC-SF with 287 NCAA division II student-athletes,

and examined internal validity of the Sport MHC-SF score, and convergent and discriminant validity of the scale scores with the MHC-SF. Their analysis supported the three-factor model of flourishing in the sport domain. The convergent validity of the MHC-SF and sport MHC-SF were moderately positive, which demonstrated that global and sport flourishing were separate but related constructs. Foster and Chow's work provides researchers with a valuable tool to investigate flourishing among athletes within the sport context.

Van Slingerland et al. (2019) issued the MHC-SF to Canadian university student-athletes, 388 of whom initially responded and 110 of whom completed the measure at a second time point. The authors found that 45.5% of student-athletes were flourishing at the beginning of their season and 44.5% were flourishing at the second time point. Flourishing was correlated with an absence of mental illness, but otherwise there were no significant relationships found between flourishing and the independent variables (i.e., gender, alcohol use, living situation, year of study, type of sport). The authors only reported the analysis at a population level, meaning that the extent to which individuals experienced changes in MH is unknown. Additionally, it may be that there are other factors (beyond the independent variables measured) that influence flourishing. Van Slingerland et al. concluded that future research "focused on promoting and maintaining positive mental health... within the athletics community will be important first steps in ensuring the future well-being of student-athletes" (p. 163). It is therefore important to understand the experiences of flourishing student-athletes to illuminate the strengths they possess and inform programs and policies aimed at promoting student-athlete MH.

The current study was designed to address limitations and suggestions for future directions in the literature. Keyes stated that research is warranted to understand "the strengths and competencies of flourishing individuals" (2002, p. 220) to create programs and policies that

promote MH. In the athlete MH literature, researchers have called for more qualitative and longitudinal investigations (Henricksen et al., 2020; Küttel & Larsen, 2020), and a need to explore dual-career athletes' experiences and applications of MH protective factors (Küttel & Larsen, 2020). It is particularly important to understand more about the experiences of flourishing athletes to inform the work of sport psychologists and the provision of MH services to athletes, as strategies aimed at reducing mental illness and languishing may be different from those aimed at promoting flourishing (Uphill et al., 2016). In order to address these limitations and suggestions, I set out to conduct a qualitative longitudinal investigation of flourishing student-athletes. Therefore, the purpose of this study was to investigate MH protective and risk factors among flourishing Canadian university student-athletes over the course of their sport season. It is important to note that I did not originally set out to specifically focus on women athletes. My sampling strategy (reported below) produced a sample of women. My consideration of this occurrence is presented in the conclusion.

## **Method**

### **Methodological and Paradigmatic Approach**

Interpretative phenomenological analysis (IPA; Smith et al., 2009) was used as the methodological framework for this study. IPA is suited for investigating experiences related to MH (Larkin & Thompson, 2012) as it is useful for illuminating “how individuals are perceiving the particular situations they are facing, [and] how they are making sense of their personal and social world” (Smith & Osborne, 2003, p. 55). IPA is underpinned by three main philosophical pillars (Smith et al., 2009). The first is phenomenology, which is used in IPA to understand the temporal elements of experience (Smith et al., 2009). This made IPA an appropriate method to use in order to explore individuals' perceptions of MH protective and risk factors over the course

of the season. The second pillar of IPA is hermeneutics, and in particular for IPA, the double-hermeneutic. That is, data generation is the process of researchers interpreting how participants interpreted and made sense of their experiences (Smith et al., 2009). This allowed me to interpret student-athletes' experiences and meanings in order to identify what I considered to be relevant MH protective and risk factors. The third pillar is ideography, which is the study of individuals and the case. My use of IPA and the focus on ideography allowed me to consider the individual experiences of each participant in-depth, before moving to consider broader nomothetic themes and connections between participants, in order to present convergent and divergent experiences relevant to the MH of student-athletes. IPA is therefore an appropriate choice of method for researchers seeking to understand the 'what it is like' and 'how does it work' of MH (Larkin & Thompson, 2012).

This research was approached from a pragmatic philosophical lens (Biesta, 2010). Pragmatism views "knowledge as the outcomes of processes of inquiry" (Biesta, 2010, p. 111) that is influenced by the researcher and participants. Considering that pragmatism (Biesta, 2010) and IPA (Smith et al., 2009) posit that knowledge is generated through interactions of researchers and participants, it is important to describe our professional and personal positionalities. I was a PhD candidate who had played and was actively coaching Canadian university sport. I also worked as the mental skills coach for a professional team (all in gridiron football). I had experienced and witnessed MH challenges associated with university sport and wanted to understand how to promote MH among student-athletes. The committee members were professors who studied issues related to sport participation and had expertise in qualitative methodologies, and two were former Canadian university student-athletes.

## Participants

Participants were recruited using a deductive theoretical sampling strategy (Patton, 2014) in order to find a “closely defined group for whom the research question will be significant” (Smith & Osborne, 2003, p. 56). Deductive theoretical sampling involves identifying potential participants who manifest a construct of interest in order to ensure that the sample will provide insightful perspectives in the process of data generation (Patton, 2014). Following university research ethics board approval, two recruitment strategies were used to recruit flourishing athletes. First, a study information email with links to the recruitment measures (i.e., MHC-SF; Keyes, 2009; Sport MHC-SF; Foster & Chow, 2019) was sent directly to 25 Canadian university sport coaches who were asked to forward the measures to their student-athletes. Second, the study information email was also sent to representatives of the Student-Athlete Mental Health Initiative (a Canadian student-athlete led organisation focused on student-athlete MH), who were asked to distribute the study information to their mail list. The use of the MHC-SF (Keyes, 2009) and Sport MHC-SF (Foster & Chow, 2019) ensured that participants would be able to contribute to our understanding of flourishing. Student-athletes were required to provide consent in order to complete the survey. Measures were collected and stored using REDCap electronic data capture tools hosted and supported by the Women and Children's Health Research Institute at the University of Alberta (Harris et al., 2009).

The MHC-SF (Keyes, 2009) consists of 14 items. Three represent emotional WB, six represent psychological WB, and five represent social WB. These items are scored on a one-to-six scale, one being “never” and six being “every day” over the past month (e.g., the main prompt reads, ‘during the past month, how often did you feel...’). Individuals must report high levels (i.e., a score of five or six) on one of the three items of emotional WB (e.g., happy) and six

of the remaining 11 items reflecting both psychological WB (e.g., ‘... that your life has a sense of direction or meaning to it?’) and social WB (e.g., ‘... that you belonged to a community?’) to be considered flourishing. The Sport MHC-SF (Foster & Chow, 2019) mirrors the dimensions of the MFC-SF and contextualises the prompt and questions within the sport context (e.g., the prompt ‘during the past month, how often did you feel...?’ Was changed to read, ‘during the past month, how often did your sport participation make you feel...?’). The same cut-off scores are used for the Sport MHC-SF as the original MHC-SF.

Thirty-six student-athletes completed the surveys ( $n$  men = 4). Of the 36 total respondents, 16 met the criteria for global and sport flourishing ( $n$  men = 2) and were invited to participate in the subsequent phases of the research. Six women student-athletes agreed to participate in the study. They were members of women’s cross country ( $n$  = 1), rugby ( $n$  = 4), and track and field ( $n$  = 1) teams from two universities. Participants were between 18 and 22 years of age ( $M$  age = 21,  $SD$  = 1.49). Participants were in their second ( $n$  = 2), third ( $n$  = 2), fourth ( $n$  = 1), or fifth ( $n$  = 1) year of eligibility. Participants scored an average of 5.47 ( $SD$  = 0.65) on emotional WB items ( $M$  emotional WB items above cut-off = 2.67) and 4.91 ( $SD$  = 0.70) on psychological and social WB items ( $M$  psychological and social WB items above cut-off = 8.00) on the MHC-SF. Participants scored an average of 5.16 ( $SD$  = 0.60) on emotional WB ( $M$  emotional WB items above cut-off = 2.67) and an average of 4.89 ( $SD$  = 0.84) on psychological and social WB items ( $M$  psychological and social WB items above cut-off = 8.50)

### **Data Generation**

Data were generated in three stages. Following Smith et al.’s (2009) recommendations, individual semi-structured interviews were used as the main source of data. Each participant engaged in pre- and post-season interviews, and maintained weekly online written diaries in

season. Participants provided informed consent for this stage of the study before the first interview. Both interview guides and diary prompts are included Appendix II.

### ***Pre-Season Interview***

Participants completed an individual semi-structured interview prior to their first competition of the season. The structure of the interview guide followed recommendations by Rubin and Rubin (2012). Questions were generated via brainstorming among members of the research team, which included concepts identified in previous research such as perceived differences between sport and global flourishing, protective and risk factors related to sport and global flourishing (Lundqvist & Sandin, 2014), and changes in flourishing over time (e.g., Nelson et al., 2016). An initial rapport-building conversation preceded the recorded interview, followed by a preamble outlining the study. Once recording started, participants were asked questions about their sport background and demographic information. The main questions related to participants' understanding and experiences of flourishing. Follow-up questions and probes were used where appropriate. The recorded portion of the pre-season interviews lasted between 27 and 43 minutes ( $M = 34.10$ ,  $SD = 6.54$ ).

### ***Written Diaries***

Written diaries were used to generate data in-season. Written diaries are a useful method for longitudinal data generation as they give participants opportunities for deep reflection on the topic at hand (Cresswell & Poth, 2018), which I believed would help facilitate the double-hermeneutics of IPA. As it relates to MH research, written diaries offer participants opportunities to create comfortable, secure environments for sharing information they may find sensitive (Cresswell & Poth, 2018). The diaries were sent through and stored using REDCap (Harris et al., 2009). A weekly email reminder was sent on Sunday mornings. The entry page for the diaries

included a series of prompts for participants to consider. These prompts were based on previous audio diary research (e.g., Tamminen & Holt, 2010). Participants wrote an average of 287 words each entry ( $SD = 143.70$ ), and made an average of six entries over eight weeks.

### ***Post-Season Interview***

Post-season semi-structured interviews were conducted with each participant within three weeks of their last competition. None of the participants experienced a shortened season due to the COVID-19 pandemic. Closing interviews also followed recommendations from Rubin and Rubin (2012), and included a rapport-building conversation prior to recording. Participants were asked to recount their season and were asked a series of unique questions that were generated following the third step of analysis of the pre-season interviews and diaries (outlined below). These questions were designed to gain insight into events described in the pre-season interview or diaries, the meaning participants assigned to events, or the lead author's interpretations of the events. Finally, participants were asked about perceived changes in their flourishing. The recorded portions of these interviews lasted between 20 and 40 minutes ( $M = 25.94$ ,  $SD = 6.53$ ).

### **Data Analysis**

I followed Smith and colleagues' (Smith et al., 2009; Smith & Shinebourne, 2012) recommendations to engage in an iterative six step analysis. The lead author transcribed the interviews verbatim and created pseudonyms for the participants. Once audio transcription was completed, transcripts were sent to participants who were given an opportunity to review and clarify or remove content. No changes were requested. Participants had the opportunity to review diaries before submission and therefore diaries were not returned to participants. In the first step of analysis, the lead author read and re-read the transcripts or diaries. Following the second step of IPA, descriptive notes were made for each participant's data. These steps were repeated

following each stage of data generation (i.e., pre-season interviews, diaries, and post-season interviews). Third, the descriptive notes were then analysed alongside the original quote, and early connections were made across notes once each participants' data set had been generated. For example, one initial descriptive note for a participant, Theresa, described how physical illness in season was debilitating for her flourishing initially, but data from the closing interview revealed that she was able to reframe it positively. Fourth, connections were made between themes within the data set for each participant to identify any overarching or defining characteristics that were relevant within each stage of data generation (e.g., Theresa trained in pre-season to physically prepare for sport, was injured in-season, and had reframed it positively by the post-season interview). Individual profiles were outlined for each participant to describe their season. Steps one to four were repeated for each participant, which is the fifth step of analysis (Smith et al., 2009). Finally, in the sixth step, themes were identified across cases, and some individual themes were combined (e.g., physical injuries were largely followed by identifying positives, and a nomothetic theme of "looking for positives" was made). As writing is considered part of the analytic process (Smith et al., 2009), some of these changes occurred in a discrete phase of analysis, whereas other themes were reorganised during the writing process. To further the analytic process in the writing stage, the lead author sought peer support from the last author (a key step in IPA; Larkin & Thompson, 2012) to collaboratively develop the final written results. This resulted in combining the results and discussion as part of the interpretive process in order to illustrate my interpretations.

### **Research Quality**

I followed Yardley's (2000) four principles of research quality for this study, as recommended for IPA research by Smith et al. (2009). First, Yardley discussed the importance of

sensitivity to context. This referred to both the theoretical context of the method and the topic, and the socio-cultural aspects of the research context. The lead author has attended several workshops and graduate methods lectures covering IPA research methodology, and the final two authors have both published multiple studies using IPA, which demonstrates my theoretical sensitivity to the method. I also demonstrated theoretical sensitivity to the topic in my review of relevant literature both in and beyond the context of sport, and by creating a sampling strategy to identify an appropriate sample. Second, Yardley discussed commitment and rigour. Commitment refers to prolonged engagement with the topic as a researcher and in other capacities. The lead author not only engaged with the study for over a year from recruitment to submission, but also has nine years of involvement in Canadian university sport at the time of submission. Rigour refers to the completeness of data collection and analysis, and adequacy of the sample. I demonstrated rigour by identifying a need to and actively recruiting flourishing student-athletes, generating multiple data sources from each participant, and engaging in iterative data analysis and generation (e.g., by analysing diaries and pre-season interviews and using that data to inform questions in the post-season interview). Third, Yardley presented principles of transparency and coherence. Yardley argued that transparency is reflected in clear documentation of the research process and disclosure of influences on the process. I adhered to transparency by including my interview guides and diary prompts in Appendix II, reporting a detailed method sections, and reporting our relevant positionalities and funding. Coherence refers to the cogency of the research. This coherence is evident in the alignment of my methodological and paradigmatic approach with my research purpose and data collection methods (i.e., methodological coherence; Mayan, 2009). Finally, Yardley (2000) discussed impact and importance, which refer to the theoretical and practical utility of the research. Theoretically, my research provides contributions

to both sport psychology literature and the broader body of literature investigating flourishing. I also offer practical advice for those working with student-athletes in the Canadian context, representing practical importance.

## Results and Discussion

Results are organised according to the temporal period in which they occurred. In the pre-season, participants used MH protective factors to build a foundation for flourishing at global and sport levels, and discussed making positive connections, and planning their in-season schedule. Quotes in this section were taken from pre-season interviews. In-season, participants appeared more focused on maintaining (rather than building) their global flourishing, and used MH protective factors to respond to sport challenges by managing their commitments, communicating with coaches, and looking for positives. Quotes in this section were taken from diaries and post-season interviews. Finally, in the post-season, participants used MH protective factors to re-invest in their global and sport flourishing by reflecting on their season and taking a break from sport. Quotes in this section were taken from participants' post-season interviews. An overview of the results is presented in Figure 1.

### Figure 2

*Flow Chart of Season Stages and Categories*



## **Pre-Season: Building a Foundation for Flourishing**

### ***Making Positive Connections***

Participants often spent time with people that they cared about in the pre-season. Sarah, a second-year rugby athlete, stated that she made time to go “on a like trip just with my boyfriend to the mountains. And we just had like, such a great time... you felt like you were just fortunate at the top like, I couldn't be doing any better at that time.” Similarly, family time was important in the pre-season for participants. Olivia, a third-year rugby athlete, expressed in her pre-season interview that, over the summer (off-season), she tried to spend as much time as possible “with my family... I didn't see them a lot last year. And that's [hard], I've always been very close with, like, my parents and stuff.” In addition to making time for family, she also found an important part of training in the summer was “playing with my club team... we all go to our universities, and then we all come back together... It's hard to be bummed out when you get to like be with friends, you know?” Rachel, a third-year rugby athlete, took the opportunity to focus on her growth by being more positive with her club teammates in the summer by “cheering on the other girl... talking to the other girls about like, how they're feeling and stuff like that. I think like that really helped.” She noted that playing for a supportive club team was good, because “the [positive] reinforcement from like, my team... helps remind myself like why I'm doing this.”

It is understandable that positive social connections in and out of sport were important for participants in the pre-season. Lundqvist and Sandin (2014) found that elite athletes reported relationships with teammates were important for their psychological and social WB in sport, and family and romantic relationships acted as a buffer from the sport environment and promoted global psychological WB. Stander et al. (2017) found that South African university student-athletes who experienced high levels of team embeddedness were more likely to be flourishing,

and social support in sport was identified as a sport environment MH protective factor by Küttel and Larsen (2020). Hence, a plausible interpretation is that the participants in this study spent time building positive relationships with family and significant others, and sought supportive club environments to promote flourishing prior to their university season.

### ***Planning***

Planning was an important part of the pre-season for the participants, and included planning both their social and academic schedule around their sport demands before the season started. This gave participants a sense of control over their time. Theresa, a fifth-year cross-country athlete discussed how she had grown to be proactive about the time demands of her sport by meeting with her professors during the first week of classes “and kind of explained to them the classes that I would be missing so that they knew.” This helped to reduce her stress around the time demands of her academics by appearing responsible and organised to her professors. In addition to meeting with professors, it also appeared important that participants solidified a study schedule that would fit within their sport schedule. Olivia reflected on how she had taken time over the summer to talk with “my team, and they gave me their like, how they study so then I kind of took some of that and I figured out how I need to study to succeed.” For Olivia, it seemed that this planning of study strategies allowed her to feel more prepared to manage her academic schedule, giving her confidence and building her flourishing leading into the season.

Planning the use of time is an important skill for student-athletes, as they may face additional pressures managing their time when compared to non-athlete students or non-student athletes. Studies of university student-athletes have found that student-athletes prioritised athletics over their academics, and struggled to navigate the competing demands of athletics and academics due to time constraints (Cosh & Tuly, 2014; Eccles & Kazmier, 2019). Planning has

been identified as part of proactive coping processes among women athletes (Tamminen & Holt, 2010), and women athletes who are active in responding to sport challenges report higher levels of psychological WB than those who are passive (Ferguson et al., 2014; 2015). These results suggest that participants may have used planning as a strategy to proactively maintain their MH.

### **In-Season: Maintaining Flourishing**

#### ***Managing Their Commitments***

Managing commitments was important for the participants, and appeared aimed at maintaining their global flourishing when sport challenges were high. In her post-season interview, Rachel reflected that a period of time off in-season was important for her because she “lost my dad three years ago. So it's really nice for me to... be able to spend time with my mom, because I know that she's just all by herself... I feel like I'm helping her out.” This helped Rachel through a period where she felt she was struggling to flourish athletically. Abby, a fourth-year track and field athlete, wrote in a diary entry that it was important for her to see her parents and grandparents in-season because “having my family come watch me compete and be able to do well in front of them positively impacts my flourishing more than anything really. They are always proud of me regardless of my performance!” Sarah experienced a difficult season from a performance perspective. She anticipated having a strong season based on her off-season training and pre-season performance, and ended up receiving few opportunities to play in competition. She felt that these challenges presented barriers to her flourishing in sport. She described in her diary how a break from competition allowed her to go “home that evening and I had a nice relaxing Sunday. I went for brunch and to the corn maze, then spent some time with my family. I think in life I'm flourishing.” Here, Sarah was making a distinction between flourishing “in life” while experiencing challenges in sport. This suggests she was able to make a distinction between

global and sport flourishing. Time away from sport appeared to buffer her global flourishing from sport-related challenges.

An ability to manage commitments and feel that life is in balance is important for athletes' global WB (Lundqvist & Sandin, 2014) and is an important consideration for athlete MH (Henricksen et al., 2020). As Lundqvist and Sandin (2014) noted, positive relationships with family members are important for athletes as they contribute to psychological WB at a global level, and may act as a buffer from sport-related issues. Taking time off also appears to reflect Eccles and Kazmier's (2019) conceptualisation of wakeful resting. This is a period of time that athletes dedicate to activities with low-cognitive and low-physical demands in order to allow for physical and cognitive recovery. This type of rest may be a MH protective factor. In these examples, strong family relationships appeared to reduce the pressure or disappointment of sport performances, which could insulate athletes' global WB from sport challenges.

Managing academic commitments was also important for the participants' flourishing, and presented a challenge for them to navigate. Abby discussed in her diary how, despite planning in the pre-season to attend a wedding with her boyfriend during a scheduled break, trying to balance academics became "a little bit stressful as I like to catch up on work when I have a weekend that I don't compete... [with] the wedding I was a little bit more behind than I generally like to be." Feeling behind or not in control of her academic schedule presented an issue for flourishing for Abby in-season, despite her planning during her pre-season. However, Elizabeth, a second year rugby athlete, noted that her planning in the pre-season had made an impact on her ability to manage her academic workload in-season compared to how she had felt in previous seasons. In a diary entry, she noticed that "even though things have been picking up with school I've noticed a big difference in how I've been handling the workload from last year"

due to her planning. She believed this helped her “handle school stress better and have a more well-rounded perspective that places slightly less pressure on school alone.”

The participants appeared to view themselves as active agents in managing their commitments. Balancing academics and athletics may be a unique MH protective factor for student-athletes reflective of their dual-career nature. This finding contrasts with that of Cosh and Tully (2014), who found Australian university student-athletes valued their academics, but presented themselves as passive agents in academia. Other research has shown that women athletes who take responsibility for their commitments report higher levels of psychological WB than those who avoid their commitments (Ferguson et al., 2014). Trainor et al. (2020) found that injured student-athletes go through an act of re-balancing. Re-balancing was described as athletes giving priority to other areas of their life in order to maintain their global psychological WB in the face of sport challenges. It therefore appeared important for participants in the current study to create opportunities to flourish in other domains of their life (e.g., academics) in order to buffer their global flourishing from MH challenges in sport.

### *Communicating with Coaches*

Participants discussed coach support as something that empowered them and helped them manage their expectations before and after competitions. In her post-season interview, Theresa spoke of a meeting with her coach before the conference championship, and how he encouraged her to celebrate her success in the season to that point. She said:

As the season progressed, I realised that I had the potential to maybe like medal... My coach said to me before [championship], so we're chatting, like we both like had the goal for myself to win the race. I said, in the summer, like, I just wanted to come top seven and he said, “Don't move the goalposts, like if that was the goal that you set for yourself,

you don't need to keep moving it as you improve. You just need to accept that, that you reached your goal..." So that was like really, really reassuring.

The support from her coach allowed for Theresa to appreciate her progress and manage her expectations leading into the championship race. Another participant lost for the first time of the season in her conference championship, which was an unexpected result for her and resulted in an abrupt negative change in her sport flourishing. When asked about this experience in her post-season interview, Abby recalled how her coach texted her, and said "all the things that he thought were true before [conference] were still true after... it was like, 'just because you didn't perform what you wanted before, like, doesn't mean that I don't think you can do it now'" (post-season). By explicitly communicating his belief in Abby, he was able to help Abby regain the confidence she needed to compete at a high level for the remainder of her championship events. Coaches played a key role in promoting the sport-specific flourishing of participants. Athletes have previously identified managing expectations, celebrating successes, and positive relationships with their coaches as important for psychological WB (e.g., Lundqvist & Sandin, 2014). Similarly, a number of researchers have identified that autonomy-supportive coach behaviours and social support from coaches is positively correlated with athletes' WB (e.g., Davis & Jowett, 2015; Stebbings et al., 2016). These results contribute some nuance to this discussion, by identifying specific strategies coaches can use to promote flourishing, such as by celebrating successes, helping athletes manage their expectations, or demonstrating belief in athletes following a difficult competition.

Despite the potential for coaches to promote flourishing, participants reported experiencing MH challenges when they perceived a lack of support from their coaches. Sarah met with her coach in order to discuss what she needed to improve on in order to receive more

playing time. She wrote in a diary entry that her coach told her she was “doing great. So I asked what I needed to get to the starting lineup and the response I got was that she trusts the other [player] more... It was frustrating and I think it prevents me from flourishing.” In her post-season interview, Elizabeth discussed how her team had an ongoing conflict with the coaches over the course of the season due to the team’s new playing style. She explained:

I think at the university age, a lot of us you know, have our own ability, ability to think critically and so when we're being told stuff, it's helpful to know why... I wish we had more meetings where we could communicate more where they could be [asking], "this is what we're thinking, what do you guys think?"... We'd be a lot more on the same page, and there'd be less confusion and be less frustration, I guess, too.

The coaches’ actions made Elizabeth feel undervalued, which undermined her understanding of her role and contribution to the team and negatively impacted her sport flourishing.

Our findings demonstrate that in the case of conflicts, coaches’ behaviours presented a sport-specific challenge to flourishing. An environment in which athletes feel as though they do not have a voice, or are being treated unfairly, may lead athletes to perceive that their sport context does not make sense, or is not fair for all. Controlling coach behaviours and coach-athlete conflicts are detrimental to athletes’ psychological WB (e.g., Davis & Jowett, 2014; Stebbings et al., 2016), and create coping challenges for athletes (Tamminen & Holt, 2010).

### ***Looking for Positives***

Injuries or illness were often immediately detrimental to their flourishing, and left participants feeling as though they were not able to fulfil their responsibilities to the team. Participants expressed a lack of agency in the initial stages of injury. Rachel reflected in a diary on her season that she was not:

Able to give it my all to the team this year... the season is so short that you have no time to heal up and recover or you miss stuff, and it just sucks because it feels like every time I am starting to get my groove back something else happens.

This feeling of being held back was shared in other student-athletes' experiences of illness.

Theresa was sick twice during her sport season, and said in her post-season interview that despite feeling confident in her physical ability at the start of the season, being sick was "really shitty because I felt like I was like missing time where I could be improving and would kind of have negative thoughts like... other teams are probably like getting in such good workouts right now".

Despite their initial negative reaction to injury, participants were quick to look for positives in the situation. For example, Rachel discussed how coming back from injury at the end of the season was important for her because it allowed her to see that her recovery protocol had been worth it. She wrote in a diary entry that her first game back from injury was "one of my best games of the season, and it made me feel a lot better about everything and that the reason I am doing all this and putting in all the work really is worth it." Theresa reflected in a diary entry on her return from her illness and said being able to perform well despite missing training sessions "made me confident in my fitness thus far, and it has given me the motivation to work hard in the next training block.". Elizabeth reduced the negative impact of being injured by giving more meaning to her non-performance role in sport. She wrote in her diary:

Being able to see what I can contribute on my team despite not being able to compete as a player just yet helped re-instill my self-worth and ultimately lead to flourishing. I was reminded that I have more to offer than just my athletic ability and realised that I like myself best when I can let loose around people rather than... needing to be the best.

The participants were able to recognise destructive thought patterns related to their injury experiences and shift their focus towards positives. Ferguson et al. (2014) found that a positive outlook may buffer global psychological WB from sport-related challenges. Trainor et al. (2020) identified that injured women student-athletes rebalanced their psychological WB by shifting their role focus away from sport performance and towards their other team roles. They also reported that participants in their study reported growth following injury when they looked at the injury as a learning experience. These results, combined with research by Ferguson et al. (2014) and Trainor et al. (2020), suggest that a MH protective factor may be an ability to reframe injuries or challenges in sport positively.

### **Post-Season: Re-investing in Flourishing**

#### ***Reflecting on Their Season***

Reflecting on their season mainly involved the participants discussing how they appraised the season as a whole, and tended to minimise their negative experiences while focusing on their growth and success. Theresa summed up her season saying, “I wasn’t flourishing every day and every workout... Overall, the season was good... I felt like I was flourishing [overall], but there's definitely days even like weeks where I was like, kind of worried or not [feeling] super.” Elizabeth said that by reflecting on her season, she was able to see that she was “growing in the sport, [which] helped me to feel like I'm flourishing... so even when there were challenges, it's like, ‘Okay, but I can still keep pursuing this and still keep trying to get better at it.’” This reflection was not exclusive to participants’ sport performances. Rachel said that “I felt that I was better this year at managing my time being able to just go and do other things [outside of sport and school]. So I think that I was better at... using my time

more effectively.” It therefore appeared important for sport and global flourishing for participants to reflect on their growth once the season had ended.

Reflection is an important part of athletes’ MH. Lundqvist and Sandin (2014) found identifying sport successes after the season was important for athletes’ sport psychological WB. Personal growth has been identified as a predictor of global flourishing (Robitschek & Keyes, 2009), and has been found to underpin the psychological WB of women athletes (Ferguson et al., 2014). Sport experiences such as deselection (e.g., Neely et al., 2018) and injury (e.g., Trainor et al., 2020) have been found to precipitate growth, and reflection is an important part of improving coping responses (Tamminen & Holt, 2010). My findings suggest that reflection on sport experiences may be an important part of promoting flourishing among student-athletes.

### ***Taking a Break from Sport***

Taking a break from sport after their season appeared to help participants feel mentally refreshed, and focus on the other areas of their life that were important to them. Olivia was asked if it was important to have time away from sport and the team for her MH at the end of the season. She said that at the end of the season, the team is “all burned out, like you're all doing finals. [The team is] not really like that happy camaraderie at that point. Like you're all just dying together kind of thing. So I do think like the break... is important.” Sarah realised that her break from sport helped her flourish, despite ultimately deciding to leave her team. During the break, she said she spent:

Lots of time with my family and friends and time to rest... I think I'm still flourishing [and] I think the time off helps to do that. If we are constantly only practicing I think we miss out on so many other things in life. I think balance is the key to flourishing.

Time away from their team in the immediate post-season was important for participants' flourishing at global and sport levels. Time off allowed participants to engage in other important activities for global flourishing, and allowed them to maintain positive relationships in sport. The off-season is important for student-athletes' rest, as it can allow for athletes to engage in low-cognitive- and low-physical-demand activities, as well as engage in high-cognitive-demand activities other than sport (e.g., academics; Eccles & Kazmier, 2019). Research is needed to understand the relationship between rest and athletes' MH.

### **Conclusion**

Flourishing student-athletes in the current study were able to prepare for the challenges of their season and navigate them through the application of different MH protective factors at different times, with different purposes. In the pre-season, the participants focused on using MH protective factors to build their flourishing with an absence of MH challenges. In-season, participants used MH protective factors to manage their flourishing when faced with MH challenges. In the post-season, participants shifted their focus to using MH protective factors to re-invest in their flourishing and did not report facing MH challenges at this time. This sequence is an important finding, as researchers have focused on athletes' MH as a resource to buffer them from challenges (e.g., Henriksen et al., 2020; Küttel & Larsen, 2020). I suggest that researchers should also consider MH as a resource for positive functioning in the absence of challenges.

Future research may build on this work by identifying if MH protective factors (Küttel & Larsen, 2020) may be delineated into MH protective and MH promotion factors.

The findings may also reveal some of the strengths that flourishing individuals possess. Keyes (2002) stated that it would be imperative for researchers to identify the strengths of flourishing individuals in order to advance the theory and applied services. A key strength of the participants

in the current study was an ability to recognise potential MH challenges to their sport flourishing and employ personal MH protective factors in order to insulate their global flourishing from any changes in sport flourishing. This may explain some of the convergent validity between the MHC-SF and sport MHC-SF identified by Foster and Chow (2019), who identified that sport and global flourishing were related but separate constructs for most athletes. It may be flourishing individuals are able to identify potential domain-related MH challenges and use personal MH protective factors to insulate their global flourishing. The impact of sport flourishing on global flourishing is a relationship that would benefit from future research.

Participants largely reported using personal MH protective factors. Coach support appeared to be the only sport environmental factor discussed by the participants in the current study that aligned with Küttel and Larsen's (2020) findings. However, the scheduled breaks in-season reported by the current participants may be a sport environment MH protective factor that allowed for the participants to employ personal MH protective factors (e.g., rest; Eccles & Kazmier, 2019). It is unclear if the participants did not have other sport environmental MH protective factors, or if those factors are less apparent to athletes. It appeared that participants in the current study had well-developed personal MH protective factors that helped them flourish. However, there may have been environmental factors that were not identified within the scope of this study that allowed participants to develop MH protective factors that allowed them to flourish. I concur with calls for research examining the sport environmental factors that may protect (and promote) athletes' MH (Henriksen et al., 2020; Küttel & Larsen, 2020).

Although I did not set out to only sample women, my sampling strategy resulted in six flourishing women student-athletes participating. In fact, only four men completed the initial survey and only two of these men met the criteria for global and sport flourishing. It is not clear

why men were underrepresented as a result of the sampling strategy, but it is plausible that more women participated in the study because women demonstrate a higher willingness to engage in help-seeking behaviours for mental illness than men in university sport (Barnard, 2016).

Furthermore, men report masculine norms as barriers to discussing MH issues in Canadian university sport (DeLenardo & Terrion, 2014). It may be that women were comfortable engaging in a study of MH. Future research examining MH protective and risk factors among men in Canadian university sport would be beneficial. This could be achieved by specifically targeting men in sampling and recruitment efforts.

The small sample size and focus on Canadian student-athletes limits the application of these results more broadly. I also did not compare MH protective and risk factors between sports, or collect racial or ethnic information regarding these participants, which may be important considerations for further research. Nevertheless, the results may have some analytic generalisability (Smith, 2018). Namely, the build-maintain-reinvest themes that became evident within the pre-, in-, and post-season stages represent a novel understanding into the nature of flourishing among athletes over the course of a competitive season. The combined results and discussion may also present some naturalistic generalisability (Smith, 2018), as the detailed description and interpretation of participants' experiences may facilitate the readers' ability to connect these findings with their own personal experiences. In an effort to further facilitate naturalistic generalisability, I propose the following applied considerations for those working with student-athletes based on the results. Foremost, athletes should be encouraged to engage in activities they find enjoyable and fulfilling prior to their competitive season. At this time, they may also benefit from learning how to plan their schedules. In-season, athletes (and coaches) should be encouraged to schedule time away from sport, and should be encouraged to look for

positives in all situations. In the post-season, it may be beneficial for athletes to schedule time off from their sport and reflect on their season to identify successes and new growth opportunities.

Overall, my research has addressed the needs to understand the strengths of flourishing individuals, and has expanded the use of qualitative and longitudinal methods in the study of athlete MH. By identifying how flourishing individuals prepare for and approach challenges in sport and life over the course of a season, this research has provided insights into how to support student-athletes at different stages of their season, and provides researchers with a starting point to understand the dynamic nature of athletes' MH.

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## **CHAPTER 3. Study 2**

### **The Role of Mental Health Protection and Promotion Among Flourishing Canadian University Sport Coaches**

A version of this chapter has been accepted for publication:

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## **The Role of Mental Health Protection and Promotion Among Flourishing Canadian University Sport Coaches**

Mental health (MH) is a state of well-being (WB) that allows people to feel a sense of purpose, contribute to their communities, and navigate the stresses and challenges associated with daily life (WHO, 2018). Coaches may face a range of demands and stressors that can negatively impact their MH (e.g., Norris et al., 2017). Scholars have argued there is insufficient evidence to inform the provision of MH support for coaches (e.g., Sherwin, 2017), and there are gaps in organizational policies and programs to support coaches' MH (e.g., Smith et al., 2020). Furthermore, on a practical level, some sport psychology practitioners may feel ill-equipped to provide adequate MH support to coaches due to the lack of existing evidence and supports (Kelly et al., 2018). Flourishing, part of the dual-continua model of MH (Keyes, 2002), may be a useful way of understanding MH promotion among coaches in order to address these concerns because flourishing is conceptualised as the presence of positive functioning rather than the absence of mental illness. Therefore, the current study investigated how flourishing university sport coaches protected and promoted their flourishing.

Broadly, this study can be situated as a positive psychology approach to the study of coach MH. Positive psychology is an area of growing interest in the sport psychology literature. Prominent concepts that have been studied include resilience (Fletcher & Sarkar, 2012), thriving (Brown et al., 2018), and positive growth (Neely et al., 2018). However, there are some concerns with the imprecise use of terminology across the positive psychology literature. For example, researchers have used the term 'flourishing' to investigate Ryff's (1988) psychological WB (Ferguson et al., 2019), and others have used the dimensions of Keyes' (2002) flourishing

without naming it or contextualising it as MH (Lundqvist & Sandin, 2014). Therefore, to clearly situate the current study in the positive psychology literature and to avoid conceptual slippage, I adopted Keyes' (2002) conceptualization of flourishing for the current study.

It is important to specify which approach to flourishing is used to guide a study because multiple terms and approaches have been used to describe flourishing in the literature (Agenor et al., 2017). There are currently four main models: Huppert and So's (2013) flourishing; Diener et al.'s (2010) model of psychosocial flourishing; Seligman's (2011) positive emotions, engagement, positive relationships, meaning, and accomplishment model of flourishing; and Keyes' (2002) dual continua model of mental health. Of these models, Agenor et al. (2017) argued that Keyes' model had the strongest and most transparent theoretical rationale. Keyes proposed a dual-continua model of MH that challenged the traditional deficit reduction approach which treated MH as the absence of mental illness. In Keyes' model, one continuum represents varying degrees of the presence or absence of mental illness, and the other represents varying degrees of the presence or absence of MH. Keyes proposed that the presence of complete MH is called flourishing, which consists of 13 symptoms representing emotional, psychological, and social WB. The two items of emotional WB (i.e., happiness and life satisfaction) were derived from Keyes' (2002) observation that research examining emotional WB would assess some form of subjective positive affect and life satisfaction. Ryff's (1989) six items of psychological WB (i.e., autonomy, self-acceptance, positive relations with others, purpose in life, personal growth, environmental mastery), and Keyes' (1998) five items of social WB (i.e., social acceptance, social actualisation, social contribution, social coherence, social integration) were used as the dimensions of psychological and social WB (Keyes, 2002).

Keyes argued that although each type of WB has often been studied separately, researchers have demonstrated that these types of WB were in fact distinct but related constructs with their own associated beneficial outcomes. To be considered flourishing, Keyes proposed that an individual had to feel one of the dimensions of emotional WB every day or almost every day in a given month, and six of the remaining 11 dimensions of psychological and social WB every day or almost every day in the same time period. These levels were chosen because they reflected the then-current Diagnostic and Statistical Manual of Mental Disorders threshold for measuring depression (i.e., the presence of one affective symptom and greater than 50% of the total symptoms). The opposite of flourishing is not mental illness, but languishing, which is described as feeling void, hollow, and without purpose (Keyes, 2002). Those who are neither flourishing nor languishing are considered moderately mentally healthy. A strength of Keyes' model is that it allows for an understanding of positive MH regardless of an individual's experience with mental illness (Keyes, 2009a). In the seminal study of the MH continuum, flourishing adults reported missing fewer working days, lower instances of mental illness, and greater ease in activities of daily life compared to people with moderate or languishing MH (Keyes, 2002).

From Keyes' perspective (e.g., Keyes, 2002; 2007; 2009a), the prevention and treatment of mental illness does not necessarily lead to more mentally healthy individuals. In fact, he argued that the prevention of mental illness was insufficient to promote MH, and that increasing MH would require separate strategies from those traditionally used in mental illness prevention. A review of research with post-secondary students identified that strengths- and skills-based approaches to MH promotion both promoted MH and reduced mental illness, whereas psychoeducational mental illness prevention programs were largely ineffective at promoting MH

or preventing mental illness (Conley et al., 2013). Research specifically examining flourishing has found that individuals who maintained or promoted their MH to flourishing over a two-year span were less likely to experience depression than those who do not flourish (Keyes et al., 2020). Together these studies lend support for Keyes' (2002; 2007; 2009a) arguments that efforts to promote MH will be unsuccessful if using programs designed to prevent mental illness. In addition, these studies suggest that the promotion of MH may buffer individuals from experiences of mental illness. It is therefore imperative to understand how flourishing might be promoted and protected in different contexts as a strategy to both prevent mental illness and promote the benefits associated with high levels of MH.

Individuals who are flourishing and languishing demonstrate distinct and dynamic patterns of WB (e.g., ways in which they understand and appraise their own actions and interactions with others; Wissing et al., 2019). For example, flourishing individuals are more likely to be motivated to build reciprocal relationships that allow themselves and others to experience appreciation, growth, and support, whereas languishing individuals are more motivated to build relationships in order to receive social support (Wissing et al., 2019). Likewise, flourishing individuals felt that their work gave them meaning or purpose, while those who were languishing rarely reported work as a meaningful part of their lives (Wissing et al., 2019). Flourishing individuals are more likely to report pursuing opportunities for personal growth (Robitschek & Keyes, 2009), and other research has demonstrated that engaging in actions perceived to improve the world or that are kind to others can promote flourishing (e.g., Nelson et al., 2016). Keyes (2009a) has suggested that flourishing in multiple life domains may contribute to global flourishing, and research by Foster and Chow (2019) has shown that for flourishing in the sport domain is related to, but does not entirely predict, global flourishing

among university student-athletes. Researchers have typically examined experiences relevant to global flourishing, indicating the need to study how flourishing individuals manage the demands of important domains of life (e.g., the sport domain for coaches) in ways that result in the protection and promotion of global flourishing.

### **Coach Flourishing, Mental Health, and Well-being**

Due to the lack of clarity around terms related to MH and WB both within and outside of sport (Lundqvist, 2011), I provide a brief overview of conceptual differences of related terms (for a comprehensive review, see Brown et al., 2017). Flourishing shares a number of similarities with the term thriving, and the two are often seen as synonymous. Similar to thriving - and unlike resilience and stress-related or post-traumatic growth - flourishing is a relatively stable state that does not require a stressor to precipitate it (Brown et al., 2017). Unlike thriving, flourishing is not contingent on an individual experiencing successful performances or physical functioning (Brown et al., 2017). This means an individual may flourish after an unsuccessful performance (e.g., losing a competition), or while injured, even though they may not be thriving by definition.

Few studies in sport psychology research have examined actions and behaviours that may promote flourishing or form patterns of WB leading to flourishing. In a study of Canadian coaches, McNeil et al. (2018) found that coaches who scored highly on the Mental Health Continuum-Short Form (MHC-SF; Keyes, 2009b) reported higher levels of self-regulation and lower burnout symptoms when compared to their moderately mentally healthy and languishing peers. This study suggests that self-regulation may be an important psychological protective or promotional factor for flourishing. However, McNeil et al. (2018) did not address the specific actions and behaviours related to self-regulation or otherwise used by the coaches to promote

their flourishing. Understanding these actions and behaviours remains an important area for further empirical investigation.

Given the limited existing research on flourishing among coaches, the current study was also informed by other MH research with coaches. Much of this research has focused on the coaches' role in supporting athletes' mental health (e.g., Bisset et al., 2020). More recently, MH literacy (i.e., the attitudes, behaviours, and understanding of MH for the purposes of MH management; Gorczynski et al., 2020) among coaches has become a topic of focus. For example, a study of coaches from the United Kingdom revealed that men had lower MH literacy than women, and that coaches who reported higher levels of WB were more open to seeking help for potential MH issues (Gorczynski et al., 2020). Likewise, a study of Canadian coaches found that men reported significantly lower MH literacy scores compared to women (Sullivan et al., 2019). Other research has identified that job variables such as high autonomy support, job security and professional development opportunities, and positive affective states have been positively correlated with higher levels of psychological WB among coaches (e.g., Bentzen et al., 2020; Norris et al., 2017). Research has also demonstrated that coaches with high WB are more likely to act in socially desirable ways towards athletes as compared to coaches with lower WB (e.g., Stebbings et al., 2012), and coach affect may impact athlete affect (Stebbing et al., 2016). Furthermore, Smith et al. (2020) reported that over half of UK coaches had experienced or were currently experiencing a self-reported mental illness at the time of their study, and 80% of coaches in their study reported that they were unaware of any sport governing body policies or programs regarding MH support. As others have noted, the study of coach WB (and subsequently MH) is in its infancy (Norris et al., 2017), and there is work to be done to generate relevant evidence that can be used to support coach MH.

In summary, flourishing (Keyes, 2002) is a useful conceptualization of MH that can help advance our understanding of MH among sport coaches (Sherwin, 2017). This is necessary in order to address the gap in both organizational policies and programs (e.g., Smith et al., 2020), as well as in practitioner knowledge (e.g., Kelly et al., 2018). MH research among coaches has largely focused on their role in supporting athlete MH (e.g., Bisset et al., 2020), and research in the area among coaches has largely been quantitatively driven (Norris et al., 2017). Theoretically informed qualitative and mixed-methods research may advance the field by generating rich data that can inform systems and structures that support coaches (Norris et al., 2017). Research that might lead to improving MH support among men coaches appears important due to their relatively low MH literacy and low tendency towards help-seeking (e.g., Gorczyński et al., 2020; Sullivan et al., 2019). I conducted a qualitatively driven “quan→QUAL” study (Ivankova, 2013; Mason, 2006) examining flourishing Canadian coaches. Specifically, the purpose of this study was to investigate how flourishing Canadian university sport coaches protected and promoted their flourishing. Although not my initial intent, my sampling procedure resulted in a sample of entirely men coaches. My consideration of this outcome is presented in the discussion.

## **Method**

### **Philosophical and Methodological Approach**

This research was approached from a pragmatic philosophical perspective (Dewey, 1920). Pragmatism is often used as a justification for the use of practical methods by social science researchers, with little consideration given to the philosophical underpinnings of pragmatism (Morgan, 2014). Dewey’s pragmatism is a rejection of metaphysical properties of ontology and epistemology as a means of understanding the nature of reality (Morgan, 2014). Instead, Dewey’s approach considers the question, “what is the nature of human experience?”

(Morgan, 2014, p. 1047). In this vein of pragmatism, Dewey (1920) proposed that human experience is shaped by iterative processes of individuals' interacting with their environment and interpreting the consequences of action. Dewey argued that an individual who acts with intent will have consequences that result in emotional or physical sensations that provoke reflection on action. This reflection leads to the adaptation of future actions. Dewey (1920) termed this action-consequence-adaptation process as inquiry, and processes of inquiry are what enable people to generate warranted assertions of the human experience. This assumption provided a foundation for my own inquiry, in that I set out to interpret what actions flourishing coaches interpreted as promoting and protecting their flourishing, and the meanings given to those actions.

I adopted a qualitatively driven "quan→QUAL" approach for this study (Ivankova, 2013; Mason, 2006). For my purposes, this meant using a quantitative screening process to recruit individuals who were flourishing to participate in a qualitative study that followed interpretative phenomenological analysis (IPA; Smith et al., 2009). IPA consists of three main dimensions, each of which were relevant to my purpose. The first dimension Smith et al. (2009) described was phenomenology, which involves the study of lived experience. In my research I aimed to interpret the coaches' experiences that they believed contributed to their flourishing. Second, IPA involves the double hermeneutic process, which involves the researcher making sense of the participants making sense of their experiences. I embraced the double hermeneutic through my iterative analytic process and interpretations of the data to present results that I believed represented the coaches' meanings of their experiences by presenting my interpretations alongside contextualised quotes from the participants. Finally, Smith et al. presented ideography as the third dimension of IPA, which is the study of the individual. Ideography is evident in my

study through the ideographic result segments, creating profiles for each participant during my analysis, and the ideographic descriptions of participants.

Consistent with my philosophical and methodological approaches, I acknowledged that the results of this study were generated through the lens of our own interpreted lived experiences. Therefore, I have briefly disclosed our relevant positionalities. I was a PhD candidate who undertook this study as part of my doctoral research. I had spent a total of nine years involved in Canadian university gridiron football at the time of submission (four years as a student-athlete and five as an assistant coach). The committee members were professors in sport psychology with expertise in psychosocial aspects of sport participation and qualitative methods. Two of the professors had experience in Canadian university sport as student-athletes and mental skills consultants. One of these two also had experience as a post-secondary coach.

### **Participant Recruitment**

University ethics board approval was obtained prior to contacting potential participants. In order to recruit coaches who were flourishing globally and in sport, it was necessary to use a screening process. I therefore used the MHC-SF and Sport MHC-SF to identify those that subjectively appraised their MH as flourishing globally and in sport. The MHC-SF (Keyes, 2009b) consists of 14 items, and the main prompt read, “In the past month, how often did you feel...” Participants respond with scores ranging from one (never) to six (every day) to three items of emotional WB (e.g., “happy?”) and 11 items of psychological (“that you liked most parts of your personality?”) and social (e.g., “that people are basically good?”) WB. The MHC-SF demonstrated a Root Mean Square Error of Approximation of 0.06, and the three-factor model of flourishing (i.e., emotional, psychological, and social WB as distinct dimensions) demonstrated a Goodness of Fit Index of 0.96 (Keyes et al., 2008).

The Sport MHC-SF (Foster & Chow, 2019) mirrored the items of the MHC-SF and framed the prompt in the context of sport (e.g., “In the past month, how often did your sport participation make you feel...”). The Sport MHC-SF demonstrated an adjusted Root Mean Square Error of Approximation of 0.07. Each of sport emotional, psychological, and social WB had moderate positive correlations with their global MHC-SF counterparts, indicating that sport-level flourishing was related to but did not entirely predict global flourishing. Keyes’ (2002) used a tertile approach (consistent with diagnostic criteria for depression) to diagnose flourishing on the MHC-SF, which was kept for the Sport MHC-SF. Scores on both scales therefore must pass a threshold of every day or almost every day (i.e., five or 6; the upper tertile) on one of the three items of emotional WB and six of the remaining 11 items of psychological and social WB for an individual to be considered flourishing.

Forty Canadian university sport coaches were sent a recruitment email that included an information letter, Keyes’ (2002) definition of flourishing, and links to the MHC-SF (Keyes, 2009b) and Sport MHC-SF (Foster & Chow, 2019) using RedCAP data software (Harris et al., 2009). Emails were obtained from university athletic teams’ websites. The invitation email, information letter, and survey links were also sent to all full-time gridiron football coaches through the Canadian University Football Coaches’ Association email list (approximately 50-60 coaches). As this study was qualitatively driven and the goal of screening was to identify flourishing coaches to interview, coaches had to consent to be contacted by the lead researcher for an interview prior to being able to complete the surveys. Those who did not consent to be contacted about interviews were unable to complete the surveys as I did not intend to use the quantitative data beyond screening.

A total of 14 coaches completed the survey. Nine of those who completed the surveys reported flourishing scores on both the MHC-SF and Sport MHC-SF, and were invited to participate in interviews. Two women coaches reported flourishing scores on both surveys but declined to participate in interviews, citing demands associated with the COVID-19 lockdown. Seven flourishing men coaches representing four different universities agreed to and participated in interviews. They coached men's gridiron football ( $n = 3$ ), men's soccer ( $n = 1$ ), women's basketball ( $n = 2$ ) and women's rugby ( $n = 1$ ). Participants were between 30 and 57 years old ( $M$  age = 45), had an average of 15 years of university coaching experience ( $Range = 8 - 21$ ) with 8 years in their current role ( $Range = 2 - 21$ ). Six coaches had the title of head coach, and one was an associate head coach. Brief descriptions of the coaches are included Table 1. Sports are not reported in that section to protect participants' identities.

Coaches who participated in the interviews scored an average of 5.05 ( $SD = 0.48$ ) on items of emotional WB ( $M$  items at or above cut-off for emotional WB = 2.71), and scored an average of 4.83 ( $SD = 0.90$ ) on items for psychological and social WB ( $M$  items at or above cut-off for psychological and social WB = 9.00) on the MHC-SF. Participants scored an average of 5.40 ( $SD = 0.66$ ) on items of emotional WB ( $M$  items at or above cut-off for emotional WB = 2.57) and 5.16 ( $SD = 0.93$ ) on items for psychological and social WB ( $M$  items at or above cut-off for psychological and social WB = 9.00) on the Sport MHC-SF.

### **Data Generation**

Data were generated using individual semi-structured interviews, which Smith et al. (2009) advocated for as the main source of data generation in IPA research. Two interviews were conducted in person. The remaining five were conducted over the phone due to locations or COVID-19 social distancing protocols. Semi-structured interview guides were developed

following guidelines by Rubin and Rubin (2012). Questions related to flourishing were informed by previous research examining flourishing in sport (e.g., McNeil et al., 2018; Pankow et al., 2021), and centred on understanding processes of inquiry as outlined by Dewey (Dewey, 1920; Morgan, 2014). All interviews were conducted by the lead author. The first part of the interview was a (non-recorded) rapport building conversation to put participants at ease and provide an explanation of the study purpose and procedures, and repeat Keyes' (2002) definition of flourishing. These conversations were extended during phone interviews to promote similar data richness to the in-person interviews (Weller, 2017). With the recorder on, demographic questions were asked about participants' sport and professional background (e.g., "Can you tell me about your background in sport?" "Why did you decide to pursue coaching at the university level?").

Moving to the main questions, participants were asked about their perceptions of flourishing (e.g., "Flourishing is considered emotional, psychological, and social well-being academically, but what does that mean to you?" "Some people think that flourishing in sport is different from flourishing in life, what do you think of that?"). Participants were next asked about events that they believed were important for their flourishing (e.g., "What are some things you do to promote your own flourishing?"). Follow-up questions (e.g., "Why do you think that's important for you to do?") as well as elaboration (e.g., "Can you expand on that?"), attention (e.g., "That's interesting,"), and clarification (e.g., "Sorry, is that important for you or the athletes?") probes were used at the lead author's discretion (Rubin & Rubin, 2012).

Finally, participants were asked a concluding question ("If you could make one change to university sport to help more coaches flourish, what would it be and why?") and asked if there was any other information they felt was important to discuss. Once the recording had ended, coaches were also asked how they would like the results presented to them and other coaches.

Interviews were transcribed by the lead author. Participants were sent their transcripts so they might add, clarify, or request the removal of information. No changes were requested. The recorded portion of the interviews were 45 minutes on average ( $SD = 1$  minute 12 seconds). Data generation ended when themes developed through analysis were appropriately explained and able to be situated in the literature (i.e., evidence of adequate data saturation; Mayan, 2009).

### **Data Analysis**

Data were analysed following the six steps presented by Smith et al. (2009). Data analysis began following the first interview and was an iterative process. First, the lead author transcribed the interviews and read the transcripts multiple times to gain familiarity with the data. Following the second step, the lead author then made initial descriptive notes throughout the data. Then, per the third step of analysis, the lead author looked for patterns across the initial notes in order to identify patterns among the notes and generate initial themes. Fourth, the lead author then created an ideographic profile for each coach using each transcript. Following the fifth step, steps one to four were repeated for each coach. Sixth, the lead author looked for patterns across profiles. This step led to an iterative process of analysis, and steps four, five, and six were repeated. Finally, the lead author sought peer support from the last author to refine the results. Peer support is an important step in generating results in IPA (Smith & Shinebourne, 2012), and led to the results presented in this manuscript.

I provide the following example to illustrate the analytic process in my research. In Alex's transcript, initial notes were made by the lead researcher that included "giving athletes academic support" and "creating a positive culture" (i.e., the second step of IPA; Smith et al., 2009). Then, as per the third step, the lead researcher considered that these were thematically connected, and created an initial theme called "supportive athlete environment." Fourth, a profile

was written for Alex that described his interpretation of flourishing, his pre-coaching and coaching experiences that were important to his flourishing, and his current strategies to promote his flourishing. Then, upon completing the profiles for the other participants (i.e., the fifth step) the lead author noticed that two coaches had discussed the importance of principles for their flourishing when looking for patterns between profiles (i.e., the sixth step).

Upon returning to Alex's profile, the lead author noticed that the themes generated in Alex's profile could be considered principles, and that Alex's behaviours to promote flourishing could be interpreted as ways of promoting those principles. The lead author then revised Alex's profile, centering on the relationships between his articulated principles and the behaviours related to the principles. The identification of principles and behaviours was then repeated for each of the coaches. The lead author generated three principles were present for each of the coaches. These were *balance*, *personal growth*, and *making a difference*, and are presented in this manuscript. Keyes' flourishing (2002) was introduced as a deductive analytic tool during the writing of the results and discussion to help frame my inductive interpretations.

### **Research Quality**

Researchers using IPA should strive to adhere to Yardley's (2000) four criteria for research quality (Smith et al., 2009). First, Yardley argued that researchers should present sensitivity to context. I demonstrated sensitivity to theoretical context in my review of the literature and my use of research from within sport and broader fields of psychology in my interpretations in the discussion, and my commitment to recruiting a theoretically relevant group of participants. Sensitivity to the research context was evident in my results, where each participant is thoroughly represented. Second, Yardley advocates for criteria of commitment and rigour. Commitment in my study is evident in my dedication to IPA and qualitative methods as

researchers. The first author has taken several graduate level courses and workshops that have covered or been dedicated to IPA, and all the authors have experience using IPA in their published research. The lead author has dedicated commitment to the topic through his other research in the area, and applied experiences. I demonstrated rigour in my research through my iterative analytic process and presentation of ideographic experiences within the themes.

Third, Yardley (2000) presented the criteria of transparency and coherence. My documentation of method, concrete example of my analytic process, and presentation of positionalities demonstrate my transparency. Coherence in my study is demonstrated by the alignment of my philosophical approach, methodological choices, and my recruitment strategy (i.e., methodological coherence; Mayan, 2009). Finally, Yardley presented impact and importance as key principles for research quality. My research makes theoretical contributions (outlined in the discussion), demonstrating the theoretical importance of my research. My work was done with consideration for coaches by asking their recommendations for disseminating my findings, and I present actionable applied considerations for sport psychologists and those who consult with coaches and sport organizations to enhance the impact of my research.

## **Results**

Our interpretation of the data was that the coaches acted in accordance with three main principles (defined here as personally created standards of behaviour), and the alignment between actions and principles protected or promoted their flourishing. These principles were *balance*, *personal growth*, and *making a difference*. *Balance* was used to protect flourishing, and *personal growth* and *making a difference* appeared to promote flourishing. Each coach reported actions that were interpreted to align with each principle. Descriptions the coaches are provided in Table 1 to contextualise their experiences.

**Table 1***Brief Ideographic Descriptions of Coaches*

Coach	Ideographic description
Alex	Alex had eight years of experience as head coach of his current team. Prior to full-time coaching, he had been a high school educator and coach in his sport. Alex had played his sport at a professional level.
Bryan	Bryan was new to his current team, having only coached there for one season. He had 15 years of coaching experience at the university level, and had been a professional athlete in his sport.
Jon	Jon had coached his current team for 15 seasons as head coach, and had 21 years of head coach experience between the university and technical college level. Jon played his sport in high school, and was a teacher before coaching full-time.
Mark	Mark had been coaching his team for 21 years. He had won several national championships as a coach. Mark had been a high-level athlete in his sport, and had been coaching since his time in his undergraduate program.
Mike	Mike had been head coach of his current team for four seasons. He had amassed 20 years of coaching experience at the university level in Canada and the United States. He began coaching immediately following his time as a student-athlete.
Nik	Nik had been the head coach of his current team for two seasons, and had 15 years total experience as a head or assistant coach at universities and technical colleges. Nik had not played his sport beyond high school.
Patrick	Patrick had been head coach of his team for three years. He had previously been an university assistant coach, and had experience as a university student-athlete. He began coaching immediately following his time as a student-athlete.

**Balance**

To the coaches in this study, balance meant being able to manage their sport and non-sport responsibilities. Balance appeared to be an important principle for protecting global flourishing because it allowed for participants to feel like active agents in all domains of their

lives and minimise the impact of sport-related MH challenges. Mark discussed things that were important for his flourishing and said his overall approach involved “balancing up your whole life and I've sort of learned that... I can move my attention to what needs the attention at that time.” Jon said a core aspect of flourishing involved establishing “some boundaries on my work life... The coach has to put the boundaries on it because the world has not put any boundaries on you. And so trying to find some balance there that way.” Balance was important to Nik because:

There's times where I feel like I can flourish as a coach. I can be a great leader, but I think I'm falling behind on say my own personal health because I'm sacrificing, or whatever word, but I'm putting all my energy into the leading part, and I'm not taking care of myself... I think it is a cumulative effect where it will catch up to you.

Coaching actions related to balance typically involved deliberately making time for non-sport commitments such as time with family and friends, and personal hobbies. When probed about the role his family played in his flourishing, Mark said it was important to share household responsibilities with his wife to promote a feeling of balance within his marital relationship, which in turn helped him feel as though he was flourishing overall. Mark discussed the importance of flexibility in his working hours as a coach, and discussed how he “can take my daughter to dentist appointments, you know, because I can come and sort of schedule my time where I need to and she's [Mark's wife] appreciative of that.” Creating opportunities for his family to be involved in the context of his own sport also appeared to help Mark promote his flourishing by providing him with a sense that he was balancing his work and family commitments. He said, “my wife likes to sit and watch like, we sit and watch [televised games]” and his “kids like to come here and run around and think they own [the field]... I like to make them feel included in everything that I do.”

Patrick's descriptions of balance implied that he was diligent in his own work, but believed it was important to take time away from work instead of creating new tasks for the sake of making more work. He said as a head coach, when "everything's planned out, everything's taken care of, and you don't need to be somewhere" he tried to take time off and "go to a movie, go play golf. Hang out with your family. It's nice to have those environments that you can go to... and be happy" outside of sport in order to flourish. Nik found balance closer to his sport environment, but recognised it was important for him to have external interests in order to flourish. Nik was asked if he did anything outside of sport that he believed was important for his flourishing. He said that he found "other hobbies... connect with other people and just try to change what your daily pattern is during that [time off] but still staying connected to the coaching world... but just trying to change the intensity of it."

For Jon, balance came in the form of setting boundaries on his work time. After John had expressed that setting boundaries on his time was important for his flourishing, he gave specific examples of boundaries he had in place, such as "I don't bring video home ... I don't answer [work] emails on weekends period. Ever. Haven't done it. And it's frustrating to our athletic directors, but I won't answer them on the weekend." When Jon was probed about other ways he managed his boundaries, he explained that an important strategy was to delegate to his assistant coaches. By having competent assistants, Jon was able to disengage from coaching when he needed to give attention to other areas of his life that he considered important. Jon said his trust in his assistants makes it "easier to feel confident giving up some things... I don't have to have my hand in every conversation or have to lead everything. I think it's really good, the confidence I have to delegate some authority to others" which allowed him to maintain his boundaries.

## Personal Growth

Personal growth was a principle related to personal progress and self-referenced success in order to promote sport-domain flourishing. Mike said to him, flourishing was visible in how “one is progressing. You know, there's a starting point. And you never really want to stay stagnant. So even though you have a starting point, you want to continue to flourish, which in my opinion, would be improving.” Likewise, Nik said “I think it took me a while to figure out and I think that flourishing or that progression, I think, that's success.” It was important that indicators of personal growth were self-referenced. Alex stated that by having self-referenced indicators of growth and “doing everything you can to get there” coaches can be “at peace in your own skin and knowing what you stand for, and knowing what you're trying to accomplish.”

Actions that related to personal growth involved learning new things and reflection. Mark found it was important for him to regularly connect with other coaches to learn new ideas in order to feel like he was progressing. Mark described a time when he “needed to shake up what I was doing, I'd got into an easy pattern and probably wasn't necessarily either working hard enough or being innovative enough” to promote his flourishing. He then decided to spend:

A week with [national champion coach in other sport] just hanging out with her and just like I was like... “I know nothing about [other sport], never played the game, but I'm just going to see what she's doing and just see if there's some things that I can pick up from her and ask her questions.” So I went on a trip to [city] with her for weekend games and sat in all the meetings and practice you know. Like I just, “Let me see what I can pick up off of a different coach,” where I'm not necessarily thinking about tactical [sport], like I was really trying to focus on the coaching, the culture stuff.

Nik looked for personal growth by coaching a high-performance youth team during the off-season. Challenging himself to develop new skills and strategies helped Nik feel energised heading into his university season, which I interpreted as promoting his flourishing. With his summer team, Nik tried to “run things differently... I’d try different things with communication players and coaching staff... different aspects from a coaching standpoint in that context. So, I think that always energised me because I come out of those summers with new ideas.”

Alex would routinely reflect on his coaching experiences in order to identify areas for improvement. During a discussion regarding some challenging parts of Alex’s coaching, he was asked how he handled some of those scenarios in ways that protected or promoted his flourishing. By acknowledging successes and negatives, and dismissing things outside of his control, Alex seemed to be able to appraise his actions and identify positives and room for improvement in his coaching and his team environment. Alex said he believed:

If you reflect on things, you're going to, I think you're going to get to a healthy spot... [and] really see what's good and bad out of the situation. So, I think I do reflect, I reflect on everything. I reflect on all the stuff that happens in our program, and reflect on every meeting, I reflect on all those conversations. Now, sometimes I can dismiss that reflection. I can say, "That's okay, that happened but it's not that significant." I can do that, and I think that's healthy to be able to do.

### **Making a Difference**

Making a difference was a principle described as coaches striving to having a positive impact on the lives of their student-athletes. Based on my interpretation of the data, it appeared that one way in which the coaches themselves were able to promote their sport-domain flourishing was by providing their student-athletes with opportunities to develop personally and

athletically. For Alex, the development of personal characteristics among his student-athletes positively impacted *his own* flourishing. Alex explained that:

It's not someone else's responsibility, in my opinion, to make me feel good. I have to... feel that I'm making a difference and feel that I'm part of something... the creation of a place where, where kids are going to be successful and they're going to graduate and... the Academic All-Canadian<sup>1</sup> stuff, the community service stuff.

This principle was mirrored by the other coaches. For instance, when Bryan was asked what the most important thing he did to protect or promote his flourishing as a coach, he replied that it was to frame his role as that of a “facilitator... referee in some instances, and moderate the conversation to take many people from diverse backgrounds and try to assist them... to find themselves and find some satisfaction in what it is that they're doing.” Patrick discussed how “when the environment starts to suffer, you feel like it's not as enjoyable to be there, you're not getting the best out of people and then you stop flourishing in a way that you could, if things were good.” It seemed that an environment that did not allow Patrick to feel like he was making a difference for his student-athletes was detrimental to his flourishing.

The coaches appeared to act in ways that were consistent with the principle of making a difference in order to promote their flourishing. For example, helping student-athletes set their personal values seemed to be a way in which Alex felt he could make a difference for his athletes, which promoted his flourishing. Alex said the part of coaching he enjoyed most was having conversations with his team in order to “help them establish... at a very impressionable time of [their] life, set some values... to figure out what it's like to be a grown up person and

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<sup>1</sup> A student-athlete who achieves an average of 80% or higher while enrolled in full-time studies and participates as a member of a university varsity team.

what those, you know, what values and beliefs” student-athletes will take away from their athletic experience.

Bryan tried to provide individual support to student-athletes in his program and found that was important for his own flourishing to help them grow and develop their personal competencies under his tutelage. Bryan was asked to elaborate on what he did specifically in his role as a facilitator that helped his flourishing. He said he was particularly attuned to:

The group dynamic... and how I can sort of step in... When I hear comments that might be a little harsh I can ask the people that are making the comments to you know, keep some of those comments to themselves, but also find opportunities to build the self esteem up of the young man that is coming into the situation.

Bryan explained that this promoted his flourishing because “when I can connect with these young men at more of an emotional level, I do really find it satisfying and validating.”

Patrick discussed that it was important for him to role model positive behaviours to his student-athletes. By framing his positive coaching disposition as serving the players, Patrick was able to promote his flourishing by coaching in a way that was consistent with his principle of making a difference. He was asked to expand how he promoted an environment that was positive for his student-athletes’ and promoted his own flourishing. He explained that if he had “a really bad day, there's something going on, I've got to be able to switch that off when I go to the field... I'm there to serve the players now... they need to see from me like good energy, positivity.”

Mike expressed that communication was important for him to make a difference for his student-athletes. After stating the importance of seeing his student-athletes reach their goals for his own flourishing, Mike was asked what he did to support his student-athletes. Scheduling was a way in which he could communicate with his student-athletes and create structures to enable

their success. He said that “every single day that we have [in the fall season], including our days off, has already been scheduled [before spring exams]. So, you know, I like to make sure that we're ahead.” Mike also tried to be aware of his student-athletes’ schedules, because it “gives them a sense of the staff cares about them... I think ultimately the guys understand that we do care about them, which only can help them along.”

### **Discussion**

The purpose of this study was to investigate how flourishing Canadian university sport coaches protected and promoted their flourishing. My interpretation of the results is that coaches in my study acted in accordance with their principles, and this alignment between coaching actions and principles protected or promoted their flourishing. I interpreted three principles that were shared among the coaches, which were *balance*, *personal growth*, and *making a difference*. Actions related to balance were used by coaches to protect their flourishing, and included involving their family in sport, engaging in non-sport activities after completing necessary work, and placing boundaries on their time. Personal growth appeared to be a principle that promoted flourishing, and actions aligning with this principle including seeking out learning opportunities, and reflection. Finally, coaches flourished when they believed they were making a difference in the lives of their student-athletes, and upheld this principle by promoting student-athletes’ personal development and providing them structure.

The main conceptual finding that coaches had clear principles and acted in accordance with these principles in their coaching roles appears to represent a novel contribution to the literature. Creating principles and upholding them in their work may be one way in which the flourishing coaches in my study assigned meaning or purpose to their work, and acted authentically (e.g., Wissing et al, 2019). Theoretically, this finding may have implications for

future research using existential approaches to sport psychology, as personally-created meaning and authenticity are core tenants of existentialism that are relevant to sport (Ronkainen & Nesti, 2017). From an applied perspective, researchers have identified that adults who engaged in activities they believed were personally meaningful regularly over four weeks reported higher levels of vitality, life satisfaction, and purpose in life (used as a proxy for psychological WB) compared to those who engaged in personally-meaningful activities less often (Hooker et al., 2020). By identifying specific principles of flourishing individuals, and strategies they used to uphold these principles that contributed to their flourishing, I have identified an important pattern of WB (Wissing, 2019) that may inform future research and applied supports for coaches (e.g., Kelly et al., 2018; Sherwin, 2017). That is, coaches in the current study appeared to flourish by acting in ways that they perceived to be consistent with their personal principles.

The first principle presented was balance, which related to coaches making time for other important domains in life in an effort to protect their flourishing. Balance involved coaches trying to involve their family in their work, making time for non-sport activities, and creating personal boundaries on their time. Stebbings et al. (2012) found that low levels of work-life conflict were correlated with high levels of psychological WB. Studies of stress and coping among coaches have demonstrated that coaches may use escape-related coping strategies and leave their sport context in an effort to minimise sport-related stressors (Norris et al., 2017) which may protect against moderate or languishing MH. For example, flourishing student-athletes spent time with their families and friends in order to protect their global flourishing from drops in sport-domain flourishing (Pankow et al., 2021). Catalino and Frederickson (2011) found that individuals who engaged in a range of activities they enjoyed (or found meaningful) were more likely to flourish compared to those who engaged in fewer enjoyable activities. In the

current study, it appeared that these other important domains, specifically in which coaches had strong social connections, were used to buffer global flourishing from the potential impacts of sport-related challenges. This may reflect an acceptance of vulnerability in sport, whereby coaches are willing to admit they may need time away from sport to feel refreshed and promote or protect their global WB (Hägglund et al., 2021). Balance may promote global flourishing by giving a sense of global autonomy through reduced work-life conflict, and protect global flourishing from sport-related MH challenges by allowing coaches to experience enhanced feelings of social WB and positive relationships with others in non-sport domains. Future research exploring if it is social WB in other domains that acts as a buffer for global WB from sport challenges, or other dimension, would be useful for informing MH supports for coaches.

The second principle was personal growth, which related to coaches consistently seeking opportunities to learn and pursue ongoing development. Previous research with coaches has demonstrated that opportunities for professional development are associated with high levels of psychological WB (Stebbing et al., 2012). Pankow et al. (2021) found that flourishing student-athletes took time at the end of the season to recognise their personal growth. A focus on personal growth is a common factor among flourishing university students (Robitschek & Keyes, 2009). These findings can be related to organismic valuing process theory (Rodgers, 1964), which proposes that individuals who regard personal development as a continual process, rather than outcomes, are likely to achieve the highest levels of growth and functioning. One interpretation of the results is that experiences of growth in sport enhanced sport levels of emotional WB through positively influencing affect and satisfaction, psychological WB by enhancing feelings of personal growth, mastery, and autonomy, and social WB by enhancing the individuals' perceptions of social actualization. These finding appears to be important for sport

organizations, as encouraging coaches to seek opportunities for personal growth (e.g., professional development) may be a strategy that can promote sport-domain flourishing.

Coaches in this study reported seeking opportunities for learning and reflection as actions that aligned with personal growth. These actions seemed to reflect informal learning opportunities (Nelson et al., 2006), which may include learning from peers or reflection. Informal learning may be one way in which flourishing coaches engage in activities for personal growth (Robitschek & Keyes, 2009). As reflection on action is central to Dewey's (1920) philosophy of human experience, it is perhaps unsurprising that reflection was an important action for these coaches. However, it is important to consider that in this case, reflection was not a passive event that happened to the coaches, but rather a tool they actively engaged with in order to facilitate growth. Critical reflection informed by personal coaching values can enhance coaches' practices (Peel et al., 2013). Informal learning may facilitate coach flourishing by allowing them to reflect on previous challenges and seek out new ways of addressing challenges in the future, thus creating opportunities for further growth. This is consistent with a process focus according to organismic valuing process theory (Rodgers, 1964) and enhancing flourishing by promoting feelings of sport-domain mastery and confidence. It may also allow for coaches to experiment with their coaching, and find new and exciting ways of engaging with their environment in order to promote their flourishing by enhancing their interest in their sport.

The final principle was making a difference, which related to the coaches promoting the personal development of their student-athletes. Stebbings et al. (2016) found that coaches experienced high levels of WB when they perceived that they were being autonomy-supportive towards their athletes. Outside of sport, Nelson et al.'s (2016) intervention study demonstrated that other-focused acts of kindness were found to increase flourishing when compared to self-

indulgent acts of self-kindness or a control group. Celebrating others' successes and responding to their excitement positively is an established positive psychology intervention known as active-constructive responding (Schueller, 2010). It is plausible that among the coaches in this study, actions perceived to make a difference for their student-athletes enhanced coaches' sport-domain affect, sport psychological WB through improving participants' senses of purpose and mastery, and sport social WB through social contribution, social actualization, and social coherence.

Specific actions and behaviours the coaches in the current study reported that related to making a difference included promoting student-athletes' personal development by helping them create personal values, building self-esteem, modeling positive behaviours, and providing structure. Seeking to benefit others through actions in a relationship was consistent with the relational patterns of WB among flourishing individuals described by Wissing et al. (2019). Creating values, building self-esteem, and modelling positive behaviours have been reported by as strategies used by Canadian university sport coaches to foster positive outcomes such as the promotion of life-skills among student-athletes (Rathwell & Young, 2018), and reflect the creation of a positive social-moral environment characteristic of athlete-centered coaching (Harvey, 2017). Indeed, the actions and behaviours reported by coaches in this study seem to reflect actions of coaches attempting to foster positive youth development (Holt et al., 2017). Due to the fact that both positive youth development through sport and MH are focused on resources that enable positive functioning and community contribution (i.e., Holt et al., 2017; WHO, 2018), future research examining the relationship between positive youth (or adult) development and MH appear warranted.

A limitation of the current study is that the response rate may have been impacted by requiring coaches to consent to interviews *prior to* completing the MHC-SF and Sport MHC-SF.

This likely limited response rates for the completion of the questionnaires. The use of single retrospective interviews limited my ability to identify if the principles I identified were more important at different times of the year, as identified in other research (e.g., Pankow et al., 2021). Remote interviews were necessary due to COVID-19 distancing protocols, but research suggests telephone interviews may negatively impact the rapport between the participant and interviewer and reduce data richness (Johnson et al., 2019). The lead author's status as a coach and the extended rapport-building conversations may have mitigated this occurrence (Weller, 2017), but it is a potential limitation nonetheless.

I was unable to recruit flourishing women coaches for this study, and it remains important to examine factors that may promote and protect flourishing among women coaches. Women are underrepresented in the Canadian coaching workforce (Reade et al., 2009) and may therefore face unique barriers and challenges in receiving adequate support from colleagues. Nevertheless, the exclusive focus on men offers some insights because men coaches report lower levels of MH literacy and help seeking (which may impact their willingness to discuss MH; Gorczyński et al., 2020; Sullivan et al., 2019).

The results have analytic generalizability (Smith, 2018) that can inform applied practice. Specifically, the connection between coaching actions and behaviours and personally-created principles as a way of promoting flourishing appear reflect a contextual pattern of WB that can inform MH supports for coaches. It therefore appears important for practitioners to help coaches explore and establish their own personal coaching principles first. Then, in ongoing consultations or check-ins, it would be fruitful to help coaches reflect on the alignment between their actions and principles to ensure that coaches are behaving in ways that will uphold their principles and promote flourishing. Practitioners working with coaches may also be able to help coaches by

encouraging them to find balance in their workload, look for opportunities for their own growth and development, and actively facilitate their athletes' personal development through supportive strategies as preliminary principles and actions. Administrators or those overseeing coaches should also be encouraged to allow coaches opportunities for balance and professional development. It may be important for administrators to consider the personal development of athletes (rather than solely their athletic development and competitive success) when evaluating coaches in order to promote coach MH.

This study identified an overarching pattern of WB among Canadian university sport coaches, in that they acted in ways that were consistent with their principles. I identified principles of balance, personal growth, and making a difference that coaches upheld in order to flourish. Through this research I have addressed a potential gap of knowledge relevant to coaches, administrators, and sport psychology practitioners (Kelly et al., 2018; Sherwin, 2017), and identified a pattern of WB that may be of theoretical relevance (Keyes, 2002; Wissing, 2019). Research with other groups in sport examining alignment between principles and actions, and their relationship to MH, may prove fruitful (e.g., administrators, athletes, parents, support staff). I recommend that practitioners working with coaches help coaches establish their own principles and act congruently with them to promote coach MH.

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**CHAPTER 4. Study 3**

**A Process Map of Mental Health Promotion Through the Coach-Athlete Relationship in  
Canadian University Sport**

## **A Process Map of Mental Health Promotion Through the Coach-Athlete Relationship in Canadian University Sport**

Mental health (MH) is a state of well-being (WB) that allows people to contribute to their community, deal with normal stresses and challenges, and function positively in their day to day lives (WHO, 2018). Keyes' (2002) flourishing is a useful construct for studying MH in sport, as it allows for the investigation of MH regardless of coaches' and athletes' experiences of mental illness (Sherwin, 2017; Uphill et al., 2016). A growing body of research has examined flourishing individuals' experiences in sport and demonstrated that coaches and athletes play a role in each other's flourishing (Pankow et al., 2021; Pankow et al., in press). However, ways in which coaches and athletes might collaboratively foster flourishing are not well understood. This study was therefore designed to investigate how MH can be promoted in sport through coach-athlete relationship, using Keyes' (2002) flourishing as the theoretical lens for MH.

### **Flourishing**

Academics have used the term flourishing to describe multiple phenomena (Agenor et al., 2017). I adopted Keyes' (2002) conceptualisation of flourishing for the current study. Flourishing is part of the dual-continua model of MH, where on one continuum is the presence and absence of mental illness, and the other is the presence and absence of MH (Keyes, 2002). Keyes considers flourishing to be complete MH, which consists of two dimensions of emotional WB (happiness and life satisfaction), six dimensions of psychological WB (self-acceptance, positive relations with others, personal growth, purpose in life, environmental mastery, and autonomy), and five dimensions of social WB (social coherence, social actualisation, social integration, social acceptance, and social contribution). The absence of flourishing is termed

languishing, and those who are neither flourishing nor languishing are considered moderately mentally healthy. Flourishing is associated with fewer missed working days, greater ease in activities of daily life, and lower all-cause mortality among American adults when compared to those who with moderate or languishing MH (Keyes, 2002; Keyes & Simoes, 2012).

Keyes (2002; 2009a) made two arguments regarding flourishing and the dual-continua model that are important for the present study. The first is that MH promotion and mental illness prevention are compatible but separate goals, and programs focused on mental illness prevention may not enhance MH (Keyes, 2002; 2009a). A review of MH interventions among post-secondary students by Conley et al. (2013) found that strengths-based programs focused on MH promotion enhanced MH and reduced instances of mental illness, whereas psychoeducational programs aimed at mental illness prevention were largely ineffective. Second, Keyes (2002; 2009a) argued that important domains of life (e.g., sport) can contribute to overall flourishing. In the development of a measure of flourishing in the sport domain, Foster and Chow (2019) found that flourishing in sport was closely related to, but did not entirely predict, levels of global flourishing. With these two arguments and supporting evidence in mind, it is important to consider how flourishing can be promoted through important domains of life such as sport to maximise MH promotion initiatives.

Flourishing individuals exhibit patterns of WB (i.e., ways in which they appraise their behaviours and give meaning to their experiences and interactions with others; Wissing et al., 2019) that are distinct from those with moderate or languishing MH. For example, flourishing individuals reported more enjoyment in their daily activities and engaged in more activities they found enjoyable as compared to those with moderate or languishing MH (Catalino & Fredrickson, 2011), demonstrated a high focus on personal growth (Robitschek & Keyes, 2009),

and were more likely to report having goals in areas of daily life than those who are languishing (Wissing et al., 2019). Flourishing individuals also interpret their relationships differently than those with languishing MH: those who are flourishing view their important relationships as sources of reciprocal support and learning, whereas languishing individuals are more likely to build relationships to receive social support from others (Wissing et al., 2019). A key omission in the extant literature is that, despite the understanding that these relationships are important and conceptualised as reciprocally beneficial, the roles of each party and the specific ways in which they might interact to provide support over time is not well understood.

### **The Coach-Athlete Relationship**

One of the most important relationships in sport is the coach-athlete relationship (Jowett & Shanmugam, 2016). Jowett (2005) proposed that the coach-athlete relationship consists of dimensions of closeness (i.e., feelings of affect evident through trust, respect, and caring), commitment (i.e., intention to maintain a close, long-term relationship), complementarity (i.e., cooperative behaviours), and co-orientation (i.e., degree of agreement about the nature of the relationship). A quality coach-athlete relationship (i.e., high levels of the four dimensions) is positively correlated with outcomes such as greater satisfaction in performance and training outcomes with the coach and athlete, and enhanced perception of skilfulness and competence among athletes (Jowett & Shanmugam, 2016). Other research has established that high quality coach-athlete relationships are more likely to result in athletes experiencing positive emotions, because the coach and athlete are more likely to work together to be proactive in anticipation of challenges as well as collaborative in reacting to stressors (Davis & Jowett, 2014). Coaches and athletes may also engage in a process of dyadic coping in response to challenges that involves a shared appraisal of a stressor as meaningful (Staff et al., 2020).

Much of the extant research examining WB in coach-athlete relationships has been focused on outcomes related to athletes (e.g., Stebbings et al., 2011). In one study of coach-athlete dyads, coaches' affect was shown to have a positive correlation with athletes' affect during the course of a practice, but athletes' affect did not impact coaches' affect in the same session (Stebbing et al., 2016). Yet, little is understood about coach WB despite its importance for positive athlete outcomes (Norris et al., 2017). This gap in the research has persisted (Potts et al., 2021), making it difficult to understand how coach WB might be promoted at all, let alone how coach *and* athlete WB can be promoted through their relationship.

### **Flourishing in Sport**

Research examining flourishing in sport has primarily focused on individuals, rather than aspects of the relationship between the coach and athlete. Among Canadian university student-athletes, the population level of flourishing has been estimated at between 45-46% (Van Slingerland, Durand-Bush, & Rathwell, 2019), much lower than the average Canadian population rate of 77% (Gilmour, 2014). Flourishing Canadian university student-athletes use a range of strategies to promote or protect their flourishing at different times of their season, and their coaches influence their ability to protect and promote their flourishing in-season (Pankow et al., 2021). Likewise, in a study examining emotional, psychological, and social WB (i.e., the dimensions of flourishing), elite orienteers reported that their coaches influenced their psychological WB in sport when the coaches provided opportunities for physical and psychological development (Lundqvist & Sandin, 2014). Despite the importance of the coach in athletes' flourishing, there is little evidence to guide coaches in promoting their athletes' flourishing. It therefore is important to consider the role of the coach in promoting student-athletes' flourishing.

Coach WB (and subsequently coach flourishing) has received comparatively less attention in the literature than athlete WB and flourishing, and largely focused on the coach's role in supporting athletes (e.g., Bissett et al., 2020). Nevertheless, researchers have established that approximately 54% of Canadian coaches are flourishing, and those who scored as flourishing on the mental health continuum-short form (the preferred measure for flourishing; Keyes, 2009b) are more likely to demonstrate higher self-regulation and lower stress than coaches who are not flourishing (McNeill et al., 2018). A study of flourishing Canadian university coaches found that they deliberately acted in ways intended to promote the growth and development of their student-athletes, and that seeing their student-athletes succeed in turn promoted the coaches' own flourishing (Pankow et al., in press). Considering that coach flourishing is associated with adaptive coach behaviours and may facilitate athletes' flourishing (e.g., McNeill et al., 2018; Pankow et al., in press), it is important to understand processes through which coaches and athletes impact each other's flourishing.

### **The Present Study**

Flourishing and the dual-continua model provide a useful theoretical lens for understanding MH promotion. Although researchers are beginning to understand psychosocial factors related to flourishing in sport, researchers have yet to examine or offer explanations of processes through which flourishing can be promoted through important relationships in sport. In fact, few studies have explored positive processes in any non-romantic relationship (Gable & Maisel, 2019). Seventy-seven percent of Canadians are flourishing (Gilmour, 2014), but only 54% and 46% of Canadian coaches and university student-athletes, respectively, are flourishing (McNeill et al., 2018; Van Slingerland et al., 2019), which means that Canadians involved in sport may in fact be less likely to flourish. Given that flourishing individuals view relationships

as sources of learning and reciprocal support (Wissing et al., 2019), the importance of the coach-athlete relationship in sport (Jowett & Shanmugam, 2016), and that coaches and athletes can influence each other's flourishing (Pankow et al., 2021; Pankow et al., in press), research examining processes of flourishing through the coach-athlete relationship appears important. Such research can advance our theoretical understanding of the interpersonal nature of flourishing at a domain level, and inform policies and programs aimed at MH promotion in sport. Additionally, such research can begin to address the lack of information regarding the promotion of flourishing in sport among athletes (Pankow et al., 2021), and the lack of evidence regarding the promotion of coach MH and WB more generally (Norris et al., 2017; Sherwin, 2017). Therefore, the purpose of this study was to identify how flourishing can be promoted through coach-athlete relationships in Canadian university sport.

## **Method**

### **Philosophical Approach**

I adopted Dewey's (1920) pragmatism as the philosophical approach for this study. Pragmatism is a useful method for social research, because it is not concerned with metaphysical claims about ontology and epistemology (Morgan, 2014). Instead, Dewey (1920; 1938/1981) is concerned with understanding the human experience, which is shaped by a process of action-consequence, and reflection. Dewey termed this process "inquiry," and inquiry is the foundation of the human experience. Through formal inquiry, or research, Dewey (1938/1981) proposed that rather than generating knowledge, 'warranted assertions' about phenomena can be made. Warranted assertions reflect the accumulation of knowledge and experience and are influenced by the methods used and the broader individual and social influences of those using the methods.

I adopted Miles et al.'s (2019) methodological approach for pragmatic qualitative research. Miles et al. do not provide a prescriptive methodology. Rather, they provide a general framework for qualitative research, and specific tools to address different research questions and purposes. Therefore, I followed their general framework for sampling and coding in addition to their specific recommendations to generate a process map and subsequent narrative explanation to generate warranted assertions about the process of promoting flourishing through the coach-athlete relationship in Canadian university sport.

In line with my pragmatic approach, I recognise that our own positionalities will influence our interpretations of the data and representation of the results. Therefore, I have provided brief descriptions of our relevant positionalities. I was a PhD candidate completing this study as the final study for my dissertation. I had spent a combined 10 years involved in Canadian university gridiron football as a student-athlete and coach, and believed that warranted assertions regarding the promotion of flourishing were essential to create programs and policies that could enhance coaches' and student-athletes' experiences in university sport. The committee members were professors in sport and exercise psychology with expertise in psychosocial aspects of sport participation, including having co-authored previous research examining flourishing in sport. Two of those authors also had experience as student-athletes and sport psychology consultants in Canadian university sport.

### **Participants and Recruitment**

University ethics board approval was obtained prior to contacting potential participants. I followed Miles et al.'s (2019) recommendations for maximum variation and within-case sampling. I recruited individuals with the intent of generating data from multiple perspectives (i.e., maximum variation) on what facilitated flourishing in coach-athlete in Canadian university

sport relationships (i.e., my defined case). Participants had to have been in their role for at least one year to ensure they had relevant experiences to discuss. Potential early participants were recruited from the first author's personal and professional networks. As the study progressed sampling was both iterative and theoretically driven in that potential new participants were contacted based on their role being identified as important, or their potential to contribute to developing ideas. All potential participants were sent an email and information letter explaining the purpose and procedures of the study. Later participants were also sent a draft of the process map and narrative explanation to guide interviews. Emails were obtained through previous contact with the first author or publicly available sources (e.g., university athletics websites).

A total of 23 participants were interviewed for the current study. The participants consisted of 10 current or former student-athletes ( $n$  women = 5), six coaches ( $n$  women = 1), three former student-athletes who had since coached at the university level (athlete-coach; AC;  $n$  women = 2), two administrators ( $n$  woman = 1), one woman who was an athletic therapist (AT), and one man who was a sport psychology consultant (SPC). Seven of the student-athletes and two of the ACs had their current or former coaches involved in the study, and four coaches had had current or former student-athletes who participated.

Collectively, the participants had sport experience at eight Canadian universities. Student-athletes were between 21 and 27 years old ( $M$  age = 23) and had between 3 and 6 years of experience in university sport ( $M$  years' experience = 4). Coaches were between 30 and 56 years old ( $M$  age = 44) and had between 7 and 30 years' experience coaching university sport ( $M$  years' experience = 15). ACs were between 27 and 29 years old ( $M$  age = 28), with an average of 7 years' experience in university sport. The SPC was 30 years old and had 3 years' experience

working with Canadian university student-athletes or teams. The administrators and AT were on average 54 years old and had an average of 19 years' experience in their role in university sport.

### **Data Generation**

Data were generated using individual semi-structured interviews. The specific questions in the interview guide changed to reflect the analytic needs as the study progressed (Miles et al., 2019), but several main areas were reflected in every interview and the guide followed a general structure (Rubin & Rubin, 2012). Each interview began with a rapport building conversation and study preamble (including defining Keyes' flourishing) that were not recorded. Once the participant had been given the opportunity to ask questions, the interviewer began the recorded portion of the interviews by asking about the participants' demographics, sport participation history, and motives for participating in university sport (e.g., What is your background in sport? Why did you want to be involved at the university level?). Then, participants were provided Keyes' definition of flourishing again and asked what it meant to them (e.g., Academically, flourishing means to be "filled with positive emotion, and functioning well psychologically and socially," but what does that mean to you; Keyes, 2002, p. 210; What does flourishing mean to you in the context of university sport?).

Next, participants were asked a series of questions about relational factors that were promoted and impeded flourishing for coaches and student-athletes (e.g., What sorts of things are you/coaches/athletes doing when you feel like you/they are flourishing? What sorts of things do you find are around you/coaches/athletes when you feel like you/they are flourishing?). Participants were also asked about the outcomes of flourishing (What moment stands out to you as a time you felt like you were flourishing in sport? How would I identify a flourishing coach/athlete?). Continuation (e.g., What happened next?), elaboration (e.g., Can you tell me

more about that?), and sequence probes (e.g., can you walk me through that step by step?) were used throughout the interviews at the first author's discretion (Rubin & Rubin, 2012).

Interviews were modified to reflect the participants' involvement in sport and gather information about emergent ideas. For example, the administrators and the AT were asked more questions about the environment and their observations of coaches and student-athletes who flourished rather than their personal experiences of flourishing. Interviews were 57 minutes on average ( $SD = 9.45$  minutes) and were transcribed using Otter.ai and cleaned by the first author. A total of 383 pages of single-spaced data were generated.

### **Data Analysis**

Miles et al. (2019) did not prescribe a set method of analysis. Rather, they advocated that researchers should use a general framework that moves from descriptive 'first cycle' coding into theming, followed by pattern-focused 'second cycle' coding. I began first cycle coding following transcription of the first interview to engage in an iterative process of data generation and analysis. Second cycle coding began following the first four interviews to inform further sampling. During the analytic process, other techniques including analytic memoing (i.e., writing out thoughts and justifications for analytic decisions), jottings (i.e., making note of decisions, inferences, and interpretations by the researcher), and diagramming (i.e., drawing relationships between themes and categories to illustrate processes) were used. Memos, jottings, and diagrams were used alongside the coded data and themes to organise the data and create the process map and narrative explanation presented in the results.

I offer the following explanation of my analytic process. References to Miles et al.'s (2019) coding techniques are included in parentheses. Following transcription of Athlete 5's interview, the lead author read the transcript and began first cycle coding by making descriptive

notes of relevant experiences (i.e., descriptive coding), made note of the use and context of repeated or interesting words such as ‘growth’ and ‘challenge’ (i.e., in vivo coding), their explanations of what flourishing was and looked like to them (i.e., concept coding), and identified processes that the participant described as enhancing or limiting their flourishing in sport (i.e., process coding). Process codes were often assigned in addition to other codes (i.e., simultaneous coding). Then, the lead author began writing brief sentences explaining the meaning of codes (i.e., theming the data). For example, an in vivo code related to growth was thematically explained as ‘progressing towards a meaningful goal.’

Following first cycle coding and theming of data for Athlete 5, the lead author returned to earlier participants’ coded and themed data, along with analytic memos, jottings, and diagrams, to engage in second cycle coding and develop themes and categories. Pattern coding involved grouping first-cycle codes of ‘growth’ and ‘challenge’ into ‘growth opportunities’ (i.e., categories or themes pattern coding), identifying the role of teammates in flourishing processes (i.e., causes or explanations pattern coding), and identifying individual factors that were discussed as important for flourishing (i.e., concept or theoretical constructs pattern coding). Patterns were then compared between positive and negative cases in the data to check if the analytic process had been done in a way that was able to separate the two.

After data generated with the first 14 participants were analysed as described above, a process map with a narrative explanation was generated and shared with the remaining nine participants to inform the development of the process map. Data generated in these interviews were coded in a similar manner to the above process, and then used to refine the relationships between themes and better explain the process map. This allowed for representativeness, if-then tests, and participant feedback within analysis, enhancing the trustworthiness of my data (Miles

et al., 2019). Finally, the manuscript was written with supervision from the last author and feedback from the remaining two authors, which served as the final analytic step (Miles et al., 2019). Research regarding flourishing and the coach-athlete relationship were used during the writing of the discussion as an analytic tool to situate the results in the extant literature.

### **Research Quality**

Miles et al. (2019) propose that pragmatic qualitative researchers should strive to uphold five criteria that indicate the research was conducted in a way that led to the generation of quality conclusions. The first is termed confirmability, which refers to the awareness and disclosure of relevant researcher biases and method. I upheld this by stating my philosophical approach, disclosing our relevant positionalities, and providing a detailed account of my entire research process. The second criterion is dependability. I demonstrated this in my research by aligning my paradigmatic and methodological approaches (i.e., methodological coherence; Mayan, 2009), review of the research process and writing contributions from the entire authorship team, and an explanatory account of my analytic process. Third is internal authenticity, which refers to the appropriateness of the findings relative to the context, and the resonance of the results with participants and readers. By engaging participants in the refinement of the process map and narrative explanation, including rich quotes in each theme, and representing each participant in the results, I have demonstrated Miles et al.'s (2019) criteria of internal authenticity.

The fourth criterion is external fittingness. I have demonstrated this in my study through situating my results in the extant literature and my considerations of generalisability in the discussion. The fifth and final criterion proposed by Miles et al. (2019) is action orientation. Each of the participants expressed that they believed the study was important and were hopeful it would inform future policies and programs, and the final five participants were given an

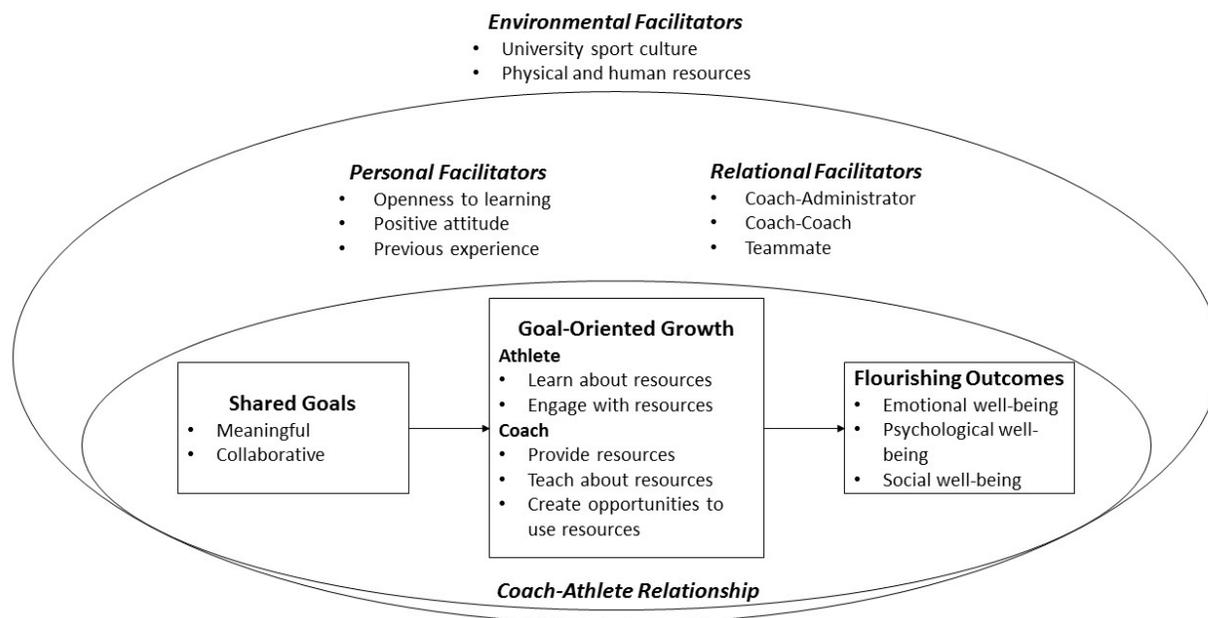
opportunity to help further develop the process map and narrative explanation to ensure it was present accessibly and meaningfully to potential users, and these participants stated that they believed the model could and would help their practices.

### **Results**

The results of this study centre on a process map of the promotion of sport-domain flourishing through coach-athlete relationships in Canadian university sport (Figure 2). This process map begins with *shared goals*. If the student-athlete and coach collaboratively develop shared goals, they will begin to identify and apply resources necessary to promote *goal-oriented growth*. If the student-athlete experiences goal-oriented growth, the student-athlete and coach will experience *flourishing outcomes*. This process is moderated by the *coach-athlete relationship* as well as *individual, relational, and environmental factors*. Despite the linear depiction of this process, it was in fact recursive in that coaches and student-athletes who experienced flourishing outcomes would experience enhanced facilitators thus easing the process of flourishing as new goals were established or further growth was realised.

**Figure 3**

*A Process Map of the Promotion of Flourishing Through the Coach-Athlete Relationship in Canadian University Sport*



### Shared Goals

Personally meaningful goals were important for coaches and student-athletes to provide them an objective to work towards. Even before setting goals, student-athletes and coaches reported that sport was a personally meaningful activity in their lives. Athlete 1 opened his interview by saying that he decided to pursue university sport because he realised that it offered opportunities for “competition, purpose, self-mastery, I guess I like that. I’ve always appreciated that about sports.” For coaches, meaning in sport came from helping student-athletes succeed in their own way. Coach 4 explained that “If you ask any coach why they coach it’s to see your athletes succeed. Like, that’s your reward... that’s where you get, for me a lot of that success and the flourishing part of it, because you’re like, ‘Okay, this is what it’s meant to be.’”

However, personal meaning for sport, in and of itself, seemed insufficient to promote flourishing. Rather, shared goals between the student-athlete and coach were important to provide a direction for them to work towards to promote flourishing. It was important for these goals to be established collaboratively through verbal communication, as Coach 5 said that in his experience with athletes, the “ones that flourish... will dive into it when they understand why it's important, why the leader they trust thinks it's important, and why it's important to them.” This collaboration was important because, as the coach observed, it created meaning for the athlete in pursuing goal-oriented growth. Coach 6 noted it was important for him to understand his student-athletes' needs in order to adapt his own expectations and develop collaborative goals:

I think once, once I spend more time with a with an athlete, and just try to understand, and draw out, what their goals are in life, then I can, I can kind of adapt, I guess, sort of my expectations. And... help them bridge and sort of move forward in terms of their goals and objectives, and maybe help them understand what it is they need to do.

As Coach 6 highlighted, the coach-athlete relationship was paramount to establishing shared goals and ensuring that the goals were congruent with the student-athlete's meaning for participation. Athlete 7 felt that his relationship with his coaches made it easy to trust them and believe that their goals would be best for him and the team. He described how “everything that [his coaches] are doing, even if it doesn't directly benefit me, is for the greater good. And it's really easy to do that when you build as good of relationships as [coaches' names].”

Some participants gave negative-case examples that illustrated the importance of collaborative goal development to ensure that the goals were oriented towards their personal meaning for sport. Athlete 9 described how her coach would dictate goals, and said it felt like the goals were “more like expectations or ultimatums in a way. ‘You need to get better at this, or

else...’ You know the goals that you want to work towards, because you want to play, but they were more in a negative light.” For AC 1, a lack of communication from his coaches when he was an athlete resulted in him believing they might not have cared about him:

With some coaches that I've had I never knew why was the second, you know? I've been second string, third string, fourth string, fifth string over my career. For years I never knew what separated me from the other athletes. I think maybe that's where some coaches fail is maybe they don't want to have that conversation, or they just don't care enough.

Athlete 8 expressed that she struggled to flourish when she was tasked with a goal that she did not believe was best for her or the team. She explained that “being in a leadership group, the coaches are like, ‘We need you to get the team on board with this...’ I personally do not believe in the system, I don't think that it works for us.” She found that situation “very stressful, and it's hard mentally because you're kind of a hypocrite to the team, but you're doing what you're told.”

### **Goal-Oriented Growth**

At this stage, student-athletes attempt to apply resources to achieve their goals. At the same time, coaches connected student-athletes with relevant environmental resources, taught student-athletes about the resources, and provide opportunities for student-athletes to apply resources to promote goal-oriented growth.

*Student-Athlete.* Resources that were important for student-athletes to achieve flourishing outcomes included appropriate facilities and human resources like their coaches, strength and conditioning coaches, and athletic therapists. Athlete 7 explained that he “saw drastic improvements when I like I started going to [strength coach] for like extra workouts or mobility programs or doing things outside of our mandatory stuff... [And] going to [position coaches] for like extra help... after practice.” Athlete 6 said in her experience as a university

student-athlete, she learned about the resources that were available to her “in our training camp... right away, they're like, these are the resources... we'll have workshops and stuff with the nutrition interns. And yeah, really go through, like, all the resources. So that made me comfortable, like seeking them out.” However, she noticed when she transferred to a new team at a different university, “I had to ask my coach or my teammates, like, ‘Where do I go for this...?’ I think when you're younger, like, I know, some people aren't as comfortable asking for help. So that could be an issue with like that accessibility” of resources. As these quotes suggest, student-athletes were not always aware of all the resources available to them. Admin 2 explained that the athletics department liked to “think that our support of the student-athletes is actually fairly well received, and... contributes to their overall flourishing. But... they're very unaware of, you know, what the department does, what our role is, what our contributions are.” Admin 1 emphasised that “your coaches are your first points of contact for any questions [student-athletes] may have” about available resources within the department, and “if it's, you know, external expertise that's needed, they'll help to connect you with those external resources.”

**Coach.** In addition to connecting student-athletes to resources, coaches taught student-athletes how to use the resources. Coach 1 explained that coaching is “about teaching the mental aspect of the game... sometimes you can get like guys who are really hard workers... and they focus on the wrong things.” Coach 5 expanded on this notion and described how he had an athlete who was immensely talented, but struggled to experience success until he took the time to teach her how to use the resources that were provided:

I have an athlete who was... in a division one [NCAA] program, had all the resources of a division one program, which is immense compared to our budgets and [resources]... She came here, she became a two-time all-star for us. One of our probably all-time best

athletes we had from a [sport] success standpoint, and I didn't have more of any resources. We taught her how to use resources that we had, to make them work... Like, "Here's the benefits, here's how it can help you individually..." I think that it was teaching her how to, what was important to her, and what you need to use, as opposed to having just those things. So I'm the gatekeeper, and teaching her how to use them.

It was important for coaches to provide the student-athletes with opportunities to apply the resources in a controlled setting for the student-athlete to safely learn how to use them. Coach 2 articulated this succinctly and said his job is to "desensitise [student-athletes] to the challenges that they're going to be receiving through their athletic career, so that... once these opportunities arise, they're viewed as opportunities rather than challenges." Athlete 4 similarly described his process of learning new skills and techniques and said that his coaches "provide the opportunity [to practice]. And in addition to that, once the opportunity has been provided... they will assist in providing cues and techniques" to help him reach his goals.

Finally, ongoing dialogue between the student-athlete and coach allowed for a communal appraisal of the adequacy or appropriateness of the resources being provided to the student-athlete. Athlete 3 explained that her coach had provided her a training program that:

Was frustrating me and I was like, I feel like I'm not getting anything out of this. So I met with [coach] and talked to him about it. And then he was like, "Okay, well, thank you for telling me because otherwise, I wouldn't know."

Coach 3 said that from her perspective, "I can't answer questions that I don't know they have. And so it really is incumbent on the athlete to... get clarity and they can find out you know, where they stand, what they need to do." AC 3 recounted her experience as an athlete and spoke to the interactive nature of this stage of flourishing promotion. She recalled:

If I needed to talk about nutrition or other things that weren't specifically his job, like nutrition, or what we're doing in the weight room, he was able to, like gather those resources, and provide those to me so that I could kind of go out on my own, and do things that were above and beyond... [Coach] would always say, "I might not know the answer, but I will find out for you."

### **Flourishing Outcomes**

Flourishing was promoted between the student-athlete and coach when growth occurred, and manifested in three main ways related to emotional, psychological, and social WB. Outcomes related to emotional WB were pride or joy at being able to see or experience student-athlete growth. Psychological WB was realised through enhanced feelings of personal confidence and personal development. Finally, outcomes relating to social WB were realised through contributing to a positive social environment. Each of these outcomes served to enhance participants' personal, relational, or environmental facilitators.

***Emotional WB.*** Emotional WB was realised through feelings of happiness, pride, and joy surrounding their sport participation when student-athletes experienced goal-oriented growth. Athlete 3 described experiencing emotional WB after she reached a goal of returning to sport after an injury, and said "it was like, Oh, my word somehow I got over this massive mental barrier... So like that, I think added to my flourishing a lot... the kind of emotional mental success of it." For Coach 2, his emotional WB was enhanced when a student-athlete would excitedly come tell him "that they did really, really well... hitting a new personal record in the bench press, or getting stronger, being faster or anything like that. It's just seeing their growth... will then help me to also flourish." Coach 3 said seeing student-athletes grow was:

Just the best feeling in the world. It's... seeing them be able to do something that they couldn't do before, right? Those are some of the best feelings that you can have as a coach, I think, because they're so happy for themselves... I can remember really vividly at some moments in time where I saw an athlete break through something that was just such an obstacle for them. And all of a sudden, they just crashed through that glass ceiling. And I remember that as vividly as I would remember the final point on national championship gold medal, you know? It's similar feelings, they stay with you forever.

Student-athletes recognised the impact they had on their coaches' emotional WB. Athlete 6 explained, "when an athlete is like, doing well and succeeding, and they come to practice excited and ready to work hard, I think that in a way makes the coach happy and gives them energy."

***Psychological WB.*** Outcomes related to psychological WB were related to enhanced confidence and purpose for coaches and student-athletes, and coach growth. Coach 5 directly addressed enhanced confidence associated with flourishing by stating that flourishing as a coach meant "feeling confident enough in what you're doing, to continue to grow and improve... You're seeing successes, you're seeing things achieved, and it's continuous, it's more than just one thing." Athlete 9 alluded to enhanced purpose when she described a flourishing student-athlete as someone who is "dedicated, who is passionate about what they're doing and what their involvement in the sport is. They show up to every game, and every practice, and every workout session, and every film session is just like, buys into the process." Coach 1 said helping his student-athletes flourish had "a tremendous impact on [me] personally... and everything that they do has a tremendous impact on how I grow and how I develop as a coach."

**Social WB.** It seemed that by experiencing success in the sport environment, both coaches and student-athletes were more likely to appraise the environment as something positive that they would give back to. Coach 6 explained:

The people that I played with and coached with you know, they have flourished. And from that, there, there are individuals who I'd say are, are, are mentally sound and in respects of mentally healthy, right. I think that's why they want to give back there is that there is that they feel safe [in the environment].

AC 2 gave an example of her experience being on a team where for three years she felt like she and her team were flourishing. She described the social dimensions of the group during that time:

Everybody wanted to hang out, we had been through some whatever ups and downs together. And it was just like you looked and it was like, you could tell that it didn't matter. You could go up to anybody on the team. I was like, "Hey, like, hey you over there. You wanna go hang out? Like you want to go study in the hall?" "Yeah, sure, I'll hang out with you." And it was, there was just no concern. There was no real cliqueness, or individual groups. Everyone was just like pals and you wanted to be around.

## **Facilitators**

### **Coach-Athlete Relationship**

A coach-athlete relationship built on mutual respect, trust, and understanding facilitated the creation of shared goals and goal-oriented growth. Athlete 5 recounted how her coaches tried to connect with her and her teammates in simple ways, such as "acknowledging people at practice... asking how your day was or anything like that. I know, like, sometimes there are feedback meetings, like I've had really good feedback at them, where I'm like, wow, they actually do really care." She went on to explain that those moments and "those good feedback

meetings, where you can see that they actually really do care about you makes it like, more understandable when like, tensions are just running high.” Coach 6 explained that:

If there's a strong relationship, and a strong trust there, then I think the intentionality of what I'm trying to assist the athlete to achieve, they put faith and trust in me, I think they will, you know, take my guidance and utilise it... but if there isn't that relationship, then I think the intentionality you know, is marginalised and minimalised.

The SPC claimed it was easy for him to identify coaches who would flourish in sport:

The reason why good coaches are coaching is ... the progress they've seen with the athletes, and then it was very intrinsically motivated just for them to help [the athletes] progress... that helps them and the athlete flourishes because they know that they have the support of the coach, to help them with those outcomes that they know that they're not just for their performance, but for their flourishing outcomes.

### **Personal Factors**

Personal factors included personal characteristics, traits, and supports that coaches and student-athletes possessed independent of sport. According to Coach 5, it was important for coaches to “have a clear understanding of myself, know who I am, and what I want to achieve” in order to flourish. Coach 1 felt that another personal factor that was important for coaches was “balanced goals with your family, and your and your friends socially. I think one thing that all football coaches probably struggle with somewhat is making sure that balance is appropriate.”

Athlete 2 said an openness to learning was imperative to flourishing in sport for student-athletes, and discussed how he “had to learn... to like, take criticism... I still struggle with it sometimes, but I think that’s something that’s almost a must... It makes it easier to be successful,

‘cause you’re willing to learn and to be coached.” Admin 2 said he believed that student-athletes who are more likely to flourish:

Have a very positive attitude when they come in... handle workload and stress very well... what they bring from their, from their, their household, their family in their environment is a huge predictor in whether or not they're going to going to do well.... so the ones that would be more likely to flourish are just the ones that really are interested in that challenge [of committing to academics and sport].

Previous experience was a moderating factor in this process for both coaches and student-athletes. Coach 6 explained how it could be useful when student-athletes had:

Obstacles in the way so they can say, “Okay, well, I this is how I can overcome this. I’ve done this before,” right? Or something is similar to that. So they said they have more life experience as they grow.

Experience was also important for coaches, because it gave them an idea of what reasonable goals might look like for a given student-athlete. Coach 5 discussed how his experience gave him “a clear understanding of what, what the bigger picture of their league or their performance setting is like,” which helped to “set reasonable goals.”

### **Relational Factors**

***Coach-Administrator Relationship.*** It was also important that coaches had positive relationships with the administrators and other coaches. If the relationship was perceived as supportive, coaches were more likely to be collaborative with student-athletes in goal development and connect them to appropriate departmental resources, as well as flourish themselves. Coach 3 spoke of how she was:

A more effective coach when I felt that the administrators had my back, that they were transparent, that I understood the decisions they made... As coaches, we were respected and trusted... It's the same as the athletes need to feel valued as a, as an employee and needing to feel valued as part of that organisation that my opinion mattered. So I think that's a huge part of [flourishing for coaches].

Admin 2 similarly described how he approached building relationships with his coaches in order to limit barriers they might have to being able to perform in their job:

We try to give them a sense of security, so that... comes down to creating an environment of trust. And that's the key thing is to is try to give them an environment where they, you know, they can go about their business, knowing that they're getting support from the administrative stuff, and that they have to worry about focusing on their student-athletes and not having to worry about... factors that would just disrupt them.

***Coach-Coach Relationships.*** Several coaches discussed that it was important to have positive relationships with other coaches in order to be able to give appropriate support and resources to student-athletes. Coach 1 explained:

I've been super fortunate to be around people that that have been, you know, good, obviously great football coaches, but even better people... I think flourishing...has a lot to do with the people that are around you and who you associate with.

Relationships between coaches could also impact student-athletes' experiences. In reference to why hiring assistant coaches was so important to her, Coach 3 claimed that she "flourish[ed] better when I'm around good people that I trust and enjoy their time. And they challenge me, we have fun, and I think the athletes see that. And I think they like it when we like each other."

***Teammate Relationships.*** For student-athletes, this process was also moderated by relationships with their teammates. Positive relationships with teammates helped student-athletes to experience growth and promote their sport flourishing. Teammates could provide insights that may have mitigated a lack of previous experience with a goal or situation en-route to flourishing. For Athlete 10, teammates were “a big thing as well, that even when things weren't always ideal, as far as sport went, I had a lot of people that I could talk to” to navigate challenges. Student-athletes also looked to what their successful teammates did in order to inform their own actions and decisions. Athlete 4 spoke of a teammate who had recently signed a professional contract and said that it was useful to look at their career because he knew what “challenges they've had to overcome, and the advantages that they've had to be in a position where they are. I can relate that to mine and know what changes I have to make to achieve those same standards.”

### **Environmental Factors**

***University Sport Culture.*** It became evident in later interviews that it was important for the culture of the university to support a student-athlete centred approach to sport. This meant that administrators, athletic therapists, and coaches prioritised the student-athletes in their decision making. Admin 1 described her approach to her work, saying:

The athletes are always at the center of, the core of what we do. We're not here, coaches aren't here, nobody's here, if we don't have athletes. So we do have to keep them... and what their needs are at the forefront, and trying to, you know, make sure that we don't lose sight of that with our big policies and decisions and processes. So even though it's rules, and... reining them in at times, at the end of the day, my role is to support them.

Athlete 4 said the athlete-centred approach was important because “having a strong campus culture between teams is important from morale standpoint,” because it provided “an additional

reason why you want to play. ‘I want to do well for myself, I want to do well, for my team, I want to do well for my institution.’”

***Physical and Human Resources.*** Coaches and student-athletes’ perceptions and awareness of resources that were available to them influenced their shared goals and goal-oriented growth. If coaches and student-athletes had positive appraisals of these resources, they were more likely to use them and experience sport flourishing. Physical resources were facilities and equipment, and human resources included coaches, strength coaches, and athletic therapists. As Admin 2 explained, perception was important because “they have a very limited view of the world as student athletes. So what we do is try to create a supportive environment. And that environment includes providing good coaching and good facilities... to try to do everything in our everything in our power to make it a positive experience to be a student-athlete.” AT 1 said that in her role, it was important to have facilities (i.e., physical resources) that looked “brand new, all windows shiny, lots of new toys, and you think, ‘Wow, I just feel better by being in here.’ Right? ‘I feel better just by hanging out in here. And I haven't even done anything’” to encourage student-athletes to take advantage of the human resources also provided. She said this was key because if the perception of the space was positive, it meant “the bulk of our interactions are with positive, healthy, people who are practicing” instead of managing injury processes.

### **Discussion**

The purpose of this study was to identify how flourishing can be promoted through coach-athlete relationships in Canadian university sport. The results and process map suggest that sport-domain flourishing can be promoted through coach-athlete relationships by setting and working towards shared goals with appropriate individual, relational, and environmental facilitators in place. As such, this study contributes to understanding how coach flourishing and

WB might be promoted, an area that has received little attention to date (Norris et al., 2017; Potts et al., 2021).

This process map begins with the development of shared goals by the coach and student-athlete. Shared or common goals are a key feature of the coach-athlete relationship (Jowett & Cockerill, 2003; Jowett & Shanmugam, 2016). Jowett and Cockerill described the process of goal setting in the relationship between coaches and Olympic medalists as a transaction that involved negotiation. In the current study, it did not seem appropriate to label the creation of shared goals that lead to flourishing as a transactional negotiation (e.g., the coach telling a student-athlete to improve at a skill and attempting to motivate them through use of a tangible outcome such as playing time), but rather collaborative in that coaches took time to communicate with student-athletes in order to understand their purpose for involvement. Then, through dialogue, the coach and student-athlete agreed on shared goals to pursue. The negative cases presented in the current study suggest that transactional interactions between a coach and student-athlete may in fact present a barrier to flourishing.

Student-athletes and coaches took different roles during the pursuit of shared goals. This appeared to be different from how dyadic coping was described in a previous study of the coach-athlete relationship, in which coaches and athletes were found to engage in similar coping strategies to deal with an appraised stressor (Staff et al., 2020). In the current study, the student-athletes played an active role in using or engaging with the resources that were available to them to promote growth. In both talent and life skill development literature, authors have recently argued that athletes do not learn simply by being in an environment, but rather learn through cognitive processes of self-directed learning (e.g., Jørgensen et al., 2020; Pankow et al., 2020). Results of the current study suggest that it may be useful to teach athletes cognitive learning

strategies to empower them to be actively engaged in their own processes of growth and flourishing in sport.

The coach assumed the role of gatekeeper and educator regarding the human and environmental resources the student-athlete needed. In research and position statements surrounding MH in sport, the role of the coach revolves around connecting athletes to clinicians in order to prevent mental illness (Küttel & Larsen, 2020). This seems logical in the prevention of mental illness, as it is unfair to expect coaches to have a clinical knowledge of mental illness and be able to offer the necessary support in those cases. However, the current research suggests that coaches can play a more active role in MH promotion not only by connecting athletes to relevant resources, but also support their use by teaching the athlete how a resource might work for them and giving the athletes opportunities to apply them.

Flourishing outcomes occurred for when the student-athlete and coach recognised goal-oriented growth. The emotional and psychological benefits of positive university sport experiences are have been reported for athletes (e.g., Rathwell & Young, 2018), but are less evident for coaches. Prosocial behaviours have been previously identified as strategies used by flourishing coaches to promote their flourishing (Pankow et al., in press), can help protect the MH of athletes (Küttel & Larsen, 2020), and are generally a positive contributor to flourishing globally (Nelson et al., 2016). In addition to illuminating one way through which coaches might be able to promote their own and their athletes' MH, this finding highlights how this process can be recursive. Specifically, the enhanced social WB associated with flourishing resulted in enhanced perceptions of the participants' personal and relational facilitators which I believe will facilitate the process presented in this study for the coach and athlete in the future.

The coach-athlete relationship was the most prominent facilitator in this process map. For example, trust between the student-athlete and coach was important throughout the process map (i.e., the dimension of closeness), the setting of shared goals can be interpreted as an effort to develop co-orientation, and the movement from collaboratively developing shared goals to assuming different roles can be interpreted as a change in behaviours in the coach-athlete relationship through the dimension of complementarity (e.g., Jowett & Shanmugam, 2016). Future research would benefit from investigating the influence of coach-athlete relationship quality on the flourishing of the coach and athlete over time.

In addition to the coach-athlete relationship, individual, (other) relational, and environmental facilitators were relevant in my process map. Many of these factors have been identified in previous research as protective factors for MH in sport (e.g., Küttel & Larsen, 2020; Lundqvist & Sandin, 2014), and MH more generally (e.g., Robitschek & Keyes, 2009). The current study is a starting point to address Küttel and Larsen's (2020) call to identify ways in which different MH protective factors in the sport domain might interact or be directed in order to promote the MH of athletes (and coaches). The present study also suggests that simply placing athletes in an environment that has adequate resources would be insufficient to promote athlete or coach flourishing. The current results suggests that athletes and coaches would benefit from positive perceptions of the available resources, understanding of how resources can promote goal-oriented growth, and 'meaningful enough' goals in order to engage with the available resources in ways that will create opportunities for flourishing.

Limitations of this study include that not every university or sport in USports were sampled, meaning unique features of certain universities or sports that could have also contributed to flourishing were not explored. Additionally, retrospective interviews were used

with all participants as USports competition had been halted due to the COVID-19 pandemic. I was therefore unable to interview coaches and student-athletes at different stages of their season (e.g., pre-season, in-season, off-season) which may have helped to identify if season stages were connected with stages of the process map, or actions within the stages. This is a worthwhile consideration for future research with this process map and flourishing in sport more broadly, given that flourishing student-athletes take different approaches to protect and promote their MH during the pre-, in-, and post-season stages (Pankow et al., 2021).

It is important to consider the limitations of this process map. Although the coach-athlete relationship is a major part of sport experiences, this process map offers one interpretation of sport domain flourishing between student-athletes and coaches. It is not a comprehensive explanation of flourishing in the sport domain, or global flourishing. Researchers and practitioners should consider how the facilitators in this study might influence flourishing independent of this process, as some flourishing athletes have reported frustrations with their coaches in-season (Pankow et al., 2021). For example, it is worth investigating if and how positive relationships between teammates might promote athletes' flourishing, or how relationships between coaches might impact coaches' flourishing. This process map does not explain the interactions of highly related domains for student-athletes (e.g., academics) or coaches (e.g., family). Understanding how individuals might navigate the interplay of these domains to protect and promote their flourishing remains a key endeavour for future research.

This process map may provide additional insights into observations in other research. Wissing et al. (2019) found that flourishing individuals interpret their relationships as sources of learning and reciprocal social support. This differed from languishing individuals, who viewed relationships as a way of receiving (but not giving) social support. However, their research did

not investigate ways in which these reciprocal relationships might manifest. My research has generated an initial understanding of processes through which individuals might promote their own and others' flourishing through important relationships (Gable & Maisel, 2019).

Additionally, my process map may indirectly explain the lack of impact of athlete affect on coach affect within a single session (i.e., Stebbings et al., 2016). Athletes may face challenges and setbacks within a session that cause them to feel as though they are not experiencing growth, thus limiting their sport flourishing. However, because the coach might engage with multiple athletes in a single session or day, coaches may have more stability in their emotional WB because they engage in this process with each of the athletes they support.

There is naturalistic and analytic generalisability (Smith, 2018) that make this process map useful for practice. In regard to naturalistic generalisability, the process map generated here may resonate with individuals' experiences in other important relationships in their lives with similar dynamics (e.g., graduate student-supervisor, employee-manager), and help them make sense of their previous experiences and inform future practices. Analytic generalisability is evident in the connection of this process map within the extant literature in both sport and flourishing. Practically, it appears important to teach both student-athletes and coaches about the creation and facilitation of a strong coach-athlete relationship, the collaborative development of shared goals, and their different roles in pursuing goal-oriented growth to promote flourishing. In addition, administrators should encourage coaches to have regular meetings with athletes in order to set shared goals and evaluate the progress being made. This process map can be used by sport psychology consultants working with teams and individuals looking to promote MH by giving them a framework to apply to work with coaches and athletes, and help clients identify individual, relational, and environmental factors that can be leveraged to promote MH.

This study presented a process map outlining how sport-domain flourishing can be promoted through coach-athlete dyads in Canadian university sport. This study has contributed to our understanding of flourishing by outlining one way in which flourishing can be promoted dyadically through important relationships, and to our understanding of the coach-athlete relationship by proposing a process through which coaches and athletes can promote each others' flourishing. It is my hope that this process map will inspire future research into MH promotion in sport environments that can collectively aide in the development of robust policies and programs that can enhance the MH of all those involved in sport programs.

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## **CHAPTER 5. General Discussion and Conclusion**

## **General Discussion**

The overall purpose of this dissertation was to explore flourishing among Canadian university student-athletes and coaches. Three studies were conducted to examine different aspects of flourishing among student-athletes and coaches in Canadian university sport. The purpose of Study 1 was to investigate MH protective and risk factors among flourishing Canadian university student-athletes over the course of their sport season. The purpose of Study 2 was to investigate how flourishing Canadian university sport coaches protected and promoted their flourishing. The purpose of Study 3 was to identify how flourishing can be promoted through coach-athlete relationships in Canadian university sport.

### **Empirical Contributions**

Study 1 found that flourishing Canadian women student-athletes take different approaches to their MH at different stages of the season. In the pre-season, participants described building their MH by making positive connections with friends and family, and planning their time for in-season. In-season participants maintained their MH by managing their commitments between sport and other areas, communicating about positives and negatives with their coaches, and looking for positives in their season. In the post-season, participants described re-investing in their MH by reflecting on their season to appreciate their growth and taking time away from sport to decompress and spend time with non-sport friends. Each stage (i.e., building, maintaining, and re-investing in MH) among the flourishing student-athletes required a mix of appropriate social support (e.g., from family, friends, or teammates) and time away from their university team to engage with these sources of support. This finding points to the importance of psychological rest (Eccles & Kazmier, 2019) and the intra- and interpersonal nature of MH protection and promotion among athletes (Küttel & Larsen, 2020). That is, the participants in

Study 1 required time off (given by their coach or mandated by the administrators or league) to manage their sport and global flourishing. The participants also required an understanding of what was important to them, and what actions they needed to take in order to help their own flourishing during their time off from sport.

Study 2 found that flourishing Canadian men university coaches promoted and protected their flourishing by acting in accordance with personally created principles. Three principles were evident among each of the coaches, which were balance (e.g., making time for family and non-sport activities), personal growth (e.g., creating opportunities for professional development), and making a difference (e.g., supporting the development of student-athletes' psychosocial competencies). These results are among the first to take a qualitatively-driven approach to understanding MH among coaches (Norris et al., 2017; Potts et al., 2021). In addition, this study highlighted the importance of personally meaningful actions to protect and promote flourishing. A body of research by Ronkainen and colleagues (Ronkainen et al., 2020) has begun to explore meanings given to sport participation by coaches, but their research had not previously been connected to coach MH. Study 2 of this dissertation has added to their 'meaningful sport' research by suggesting that coaches can promote their MH by acting in ways that promote personally meaningful principles in their roles.

Study 3 presented a process map outlining how flourishing can be promoted through the coach-athlete relationship in Canadian university sport. This process began with the student-athlete and coach creating shared goals, then working towards those goals. When the student-athlete and coach recognised goal-oriented growth, they experienced flourishing outcomes. This process was facilitated by the coach-athlete relationship along with individual, relational, and environmental factors. This process map provided insights into the ways in which individuals

might construct a reciprocally-beneficial relationship that can help promote flourishing (Wissing et al., 2019), and is among the first studies to present an explanation of MH promotion in a non-romantic relationship (Gable & Maisel, 2019). Taken together, the results of the three studies conducted suggest that the promotion of flourishing in Canadian university sport requires a combination of facilitative intra- and interpersonal factors.

### **Theoretical Contributions**

This dissertation has made theoretical contributions within the sport psychology literature as well as to literature examining flourishing. As noted by Vella, Swann, et al. (2021), researchers need to be deliberate in connecting MH research in sport to explicit theories so specific constructs of MH can be targeted by policies and interventions. The use of flourishing (Keyes, 2002) as a theoretical lens in this dissertation allowed for interpretations of how specific actions and behaviours within and between domains might protect and promote the different emotional, psychological, and social dimensions of flourishing, thus creating a starting point for theoretically informed policies and interventions to promote MH through sport. Adopting flourishing as the theoretical lens for this dissertation allowed for the three studies to be situated not only within MH literature in sport psychology, but to bridge research within sport to broader literature examining flourishing in MH and positive psychology research.

This dissertation has also made theoretical contributions to flourishing. Keyes (2009) proposed that individuals can experience flourishing in important domains that impacts global flourishing, yet few studies have previously examined flourishing at a domain level. This dissertation has advanced our understanding of the relationship between domain and global flourishing by demonstrating that flourishing individuals actively dedicate time to multiple important domains (e.g., sport and family) in order to protect and promote their global

flourishing. More recently, Wissing et al. (2019) proposed that flourishing individuals engage in distinct ‘patterns of WB’ that might distinguish them from languishing individuals but did not explore these patterns within specific domains. Although this dissertation did not compare the actions and behaviours of flourishing individuals to those who were languishing (this consideration is discussed further in the limitations section), this research has nevertheless identified some patterns of WB exhibited by flourishing individuals within the sport domain.

### **Methodological Contributions**

Methodologically, these are some of the first qualitative and qualitatively-driven studies to examine flourishing in any context (Wissing et al., 2019), which has helped advance the study of flourishing by providing insights into the existing predominantly quantitative findings, and highlighted exciting new directions for research. This dissertation has also made methodological contributions in sport by generating qualitative data regarding coach MH and WB, which has been a largely overlooked methodological choice to date, providing interpretations of ‘what works for who’ regarding coach MH (Norris et al., 2017; Potts et al., 2021). Qualitative methods have been historically underused in any area of positive psychology despite the utility of qualitative data to illuminate “novel and deeper understandings of phenomena in which positive psychologists are interested” (Hefferon et al., 2017, p. 211). Furthermore, each of these studies have advanced qualitative research in positive psychology by approaching the research in a qualitative or qualitatively-driven way rather than as a supplement to quantitative data, and using analytic techniques other than thematic analysis (Hefferon et al., 2017). Collectively, these methodological decisions allowed for the generation of data that illuminated the ‘how and why’ of dimensions of flourishing in USports, rather than simply describing what happened (Hefferon et al., 2017).

## **Future Research**

In addition to contributing to our knowledge of MH broadly and within sport, this dissertation has provided exciting directions for future research. A longitudinal mixed-methods study that tracked changes in flourishing at global and domain levels (e.g., sport and academics for student-athletes; sport and family for coaches) along with weekly diaries would represent an ambitious but key study to understanding the interplay of experiences within and between domains on domain and global flourishing. Such a study would benefit from the inclusion of interviews pre- and post-season as done in Study 1 of this dissertation. This would be an ambitious endeavor but would serve to bridge the results from the present three studies and advance the contributions of each study.

Future research is needed into MH promotion and protection policies among athletes. For example, many researchers and practitioners aim to help promote and protect athletes' MH as evidenced by the number of position statements Vella, Schweickle, et al. (2021) and existence of MH guidelines for organisations like USports (2020). As presented in the introduction, these statements and guidelines are unlikely to result in MH promotion as their content is focused on the prevention of mental illness. Therefore, studies are needed into all aspects of MH policies and programs aimed at MH promotion. This includes more research into MH through sport among diverse and underrepresented groups, the development of potential MH policies, the impact of policy implementation on athlete MH, as well as knowledge translation and implementation science approaches to understanding factors related to the development, uptake, and sustained impact of MH in sport policies.

In addition to policy development for athletes, research exploring the development of MH promotion programs, policies, and even minor resources like self-assessment tools may

prove important for coaches. Despite the contributions of this dissertation to advancing our knowledge, I concur with Norris et al.'s (2017) assertion that the study of coach WB (and subsequently, MH) is in its infancy. As with research among athletes, studies with coaches should explore more factors and experiences related to MH promotion and protection among coaches from diverse demographics, as well as factors related to the successful translation and implementation of evidence into practice.

Research is still needed to understand what environmental factors such as resources and policy play in the promotion and protection of MH at all levels of sport. The environment is one of the least understood aspects regarding MH in sport at any level, but likely has a major impact on MH outcomes (Küttel & Larsen, 2020; Vella, 2019). A potential starting point for research into the sport environment are the facilitators presented in Study 3. Each of the facilitators represents a factor that can be studied in full (e.g., teammate relationships, availability of human resources) that can contribute to understanding a sport environment that facilitates flourishing.

### **Limitations and Strengths**

Limitations of each study are discussed within their respective chapters. An overall limitation of the research in this dissertation is that not every university or sport in USports were represented, meaning that there are potentially unique factors to certain universities or sports that were not included in any of the three studies. Other overall limitations of this dissertation revolve around the fact that these studies focused only on one part of the dual-continua model of MH (i.e., flourishing). Languishing individuals were not explicitly included in any study (although MH levels were not used as part of recruitment for study 3 and negative cases were included). This means that languishing individuals might engage in similar actions and behaviours to those outlined in this dissertation, but do not experience MH benefits. Diagnoses of mental illness were

also not considered in this research. It is uncommon for an individual to flourish despite having a mental illness but it has been reported (Keyes, 2002). As this dissertation did not consider mental illness diagnoses among participants, the actions and behaviours described here may not be the most useful for promoting flourishing among those with mental illness. It is also possible that the flourishing participants in Studies 1 and 2 all had diagnoses of mental illness and those results may therefore represent ways in which individuals with diagnosed mental illnesses promote and protect their flourishing. A limitation specific to Studies 1 and 2 was the assumption that the actions of flourishing individuals represent actions that can promote MH among moderately mentally healthy and languishing individuals. However, those studies were not structured in a way that allowed the identification of actions and behaviours that might help individuals move from moderate MH or languishing to flourishing.

The specific strengths of each study completed as part of this dissertation have been discussed within their respective chapters, along with the empirical, theoretical, and methodological contributions presented in the General Discussion. Considering this dissertation as a whole, strengths of this research include paradigmatic coherence in that each study was approached from a pragmatic philosophical perspective, and each study demonstrated methodological coherence (Mayan, 2009). Furthermore, the combination of studies, and inclusion of perspectives from student-athletes, coaches, administrators, and other stakeholders, have enhanced the opportunities for this dissertation to project naturalistic generalisability (i.e., the ability for individuals to connect the research to their own lives; Smith, 2018). This research also serves to impact a range of individuals through the consideration of practical implications in the following section of this General Discussion.

### **Implications for Student-Athletes**

This dissertation has implications for practice. Beginning with implications for student-athletes, it is important that they understand what matters to them, so that they might engage in their time off in ways that help protect and promote their MH. Student-athletes may benefit from resources aimed at helping them plan to manage their time in-season, and being taught how to identify things they value that may help promote and protect their MH. Student-athletes may also benefit from learning communication skills that will enable them to clearly articulate their goals and needs to their coaches, and reframing techniques that will help them to identify positives during periods of stress or manage their performance expectations. Lastly, workshops teaching student-athletes and coaches to work collaboratively towards the creation and pursuit of shared goals may help both parties experience flourishing outcomes through sport.

### **Implications for Coaches**

This dissertation demonstrates that coaches can play an active role in promoting the flourishing of their student-athletes, and suggests ways in which coaches can protect and promote their own flourishing. Beginning with their role in promoting student-athlete flourishing, coaches should consider allowing student-athletes time for psychological rest when possible. This can allow student-athletes to manage their commitments. It may be useful for coaches to dedicate some time early in the season or in the pre-season to teaching student-athletes time management strategies like making a study schedule and planning out assignment timelines from information in course syllabi. Regular meetings with student-athletes can provide coaches opportunities for open communication and allow coaches to solicit feedback from individuals and the team. In my own experience, some coaches already engage in such meetings regularly and make them mandatory for student-athletes. Typically coaches who run these

meetings provide the student-athletes with a series of questions to answer before the meeting. For those new to these meetings, guiding questions should be developed. Potentially useful questions for coaches to ask student-athletes in these meetings include “What do you want to improve at most this season?”, and “What are your top three personal and team goals for this season?” Such questions can help guide coaches through the development of shared goals by giving them insight into what the student-athlete hopes to gain from their sport involvement, allowing coaches to ensure alignment between their expectations and the student-athletes’.

This dissertation also provides suggestions for ways coaches can protect and promote their own flourishing. Coaches can benefit from creating their own principles and acting in ways that promote those principles. Principles of balance, personal growth, and making a difference may be good starting points for those who have not developed their own principles yet. Taking time away from sport to spend with family and friends, involving family in their sport, creating opportunities for professional development, and looking for opportunities to help student-athletes grow and develop within and outside of sport are all specific actions that may be useful to help coaches protect and promote their own flourishing.

### **Implications for Policy**

Given the contributions and scope of the three studies in this dissertation, it is worth comparing these findings to the extant position statements and recommendations on MH in sport. Beginning with position statements, Vella, Schweickle, et al. (2021) proposed in their meta-synthesis that organisations should start with a plan to protect athlete MH and acknowledge MH as different from mental illness. This appears to be a useful starting point. However, the remainder of the synthesised recommendations are focused on the management and treatment of athlete mental illness. For example, MH literacy was not discussed in any of the three studies in

this dissertation as being related to MH promotion, but is a key recommendation in the meta-synthesis and likely has important implications for the management and prevention of mental illness. Likewise, Vella, Schweickle, et al.'s (2021) synthesised recommendations for MH screening are focused on identifying symptoms of mental illness, not tracking changes in *mental health*. I agree with Vella, Schweickle, et al. (2021) that current recommendations should be regarded with caution, as they do not appear to adequately address their goal of promoting MH. This may be due to the lack of theoretically informed research into MH in sport to date (Vella, Swann et al., 2021). It is important that sport psychology practitioners are aware of these limitations in extant recommendations so they can make informed decisions about selecting strategies that will promote MH or prevent mental illness.

Comparing the findings of the USports MH best practices (2020) to the results of this dissertation presents similar issues to those identified among the extant position statements on MH in sport. Based on the results of this dissertation and related literature, it is not clear how the four USports guidelines (i.e., ensuring access to MH clinicians for mental illness evaluation and treatment; procedures to identify athletes with mental health concerns; implementing mental health screening for depression; encouraging an environment that supports MH literacy) can attain the goal of protecting and promoting student-athlete MH. None of the USports' recommended MH best practices were reported by any of the participants in this dissertation as sources of MH protection or promotion. A clear omission arising from all policies and statements is the importance of supporting coach MH to promote athlete MH. All of this is not to say that the extant position statements are not useful, but to emphasise that they appear more likely to help athletes navigate mental illness than to reach their stated goals of protecting and promoting athlete MH. Evidently, there is work to be done in research and in practice to encourage

researchers, practitioners, and policy makers to think critically about their programs if the goal is to protect and promote athletes' (and coaches') MH.

There are few extant policies for promoting MH through sport (Vella, Schweickle, et al., 2021). Therefore, I propose that the following two recommendations be considered for adoption by policymakers in USports. First, policies limiting team activities during existing interruptions in competition (e.g., bye weeks, holidays) should be considered. This would allow both student-athletes and coaches time for psychological rest and balance, which were identified as important parts of flourishing. Anecdotally, some coaches already provide student-athletes with time away from scheduled team activities when possible, so such a policy may be relatively well supported. Of course, resources or suggestions for activities student-athletes and coaches can do with this time off to protect and promote their MH would be helpful for those who have not developed their own strategies yet (e.g., encouraging student-athletes and coaches to spend time with family and friends if possible). With the existence of out-of-season tournaments during winter break for some sports in USports such as basketball, policymakers would be wise to discuss the specifics of such a policy with student-athletes and coaches.

The second policy recommendation is to expand the role of MH practitioners within the extant USports MH guidelines. Mental health professionals and sport psychology practitioners were not identified as a resource in this dissertation, despite their professional abilities. For example, the Canadian Sport Psychology Association states that mental performance consultants and psychologists working under their banner have skills to facilitate “the development of mental and emotional skills, techniques, attitudes, perspectives and processes that lead to performance enhancement and positive personal development,” along with “physical and psychological dimensions of well-being and performance” (Canadian Sport Psychology Association, n.d., Who

We Are section). It would appear that these practitioners are already well-equipped to help student-athletes and coaches protect and promote their flourishing. However, the scope of practice for MH professionals outlined in the USports MH guidelines may not provide direction for these practitioners to promote MH. The Canadian Psychological Association (2016) released a position statement calling for public institutions (e.g., universities) to allow psychologists to practice to their full scope. The position statement noted that by the scope of practice afforded to psychologists in public institutions is often limited, resulting in bottlenecks and barriers to accessing any type of psychological services. It could be that sport psychology practitioners are facing similar challenges under current USports guidelines and are not able to practice to their full scope, thus limiting their ability to engage in MH promotion among student-athletes and coaches. By changing these guidelines to expand their scope of practice in USports, sport psychology practitioners should be better situated to use their full skill set and engage in MH promotion practices alongside their role in helping those with mental illness.

### **Conclusion**

This dissertation has made contributions to sport and positive psychology research and practice by providing a theoretically driven understanding of the protection and promotion of MH in sport. MH is and will continue to be an important topic in sport settings including university sport. Much of the extant research and practice aimed at protecting and promoting MH has instead resulted in recommendations and policy guidelines that are unlikely to have their desired impact. I hope that through this dissertation and my goals for future research, we will be able to develop complimentary recommendations and guidelines in order to truly protect and promote MH through sport so that each and every participant can flourish.

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**APPENDICIES**

## **Appendix I. Promoting Flourishing in the Coach-Athlete Relationship: A Narrative**

### **Explanation**

The process begins with the creation of shared goals in the coach-athlete relationship. If goals are developed collaboratively, they are more likely to be meaningful to both the student-athlete and coach, which will lead to enhanced effort in pursuing goal-oriented growth. During the pursuit of goal-oriented growth, the student-athlete and coach have different roles. The coach provides the student-athlete with resources, teaches the student-athlete why those resources are useful, and provides the student-athlete with opportunities (time and space) to use those resources. At this time, the student-athlete has to be willing and attempt to both learn why those resources are useful, and to engage with and apply those resources in order to achieve growth. If the student-athlete and coach engage with the resources in ways that promote goal-oriented growth for the student-athlete, both are likely to experience flourishing outcomes.

This process is influenced by a range of facilitators. The more facilitators that are present means it is more likely that the pair will experience flourishing outcomes, and experiencing flourishing outcomes will enhance the coach and athlete's perceptions of the facilitators. A coach-athlete relationship with good fit founded on trust, respect, and understanding is the main facilitator of this process. The next key facilitators are individual and relational factors. If coaches and student-athletes have an openness to learning, a positive attitude, and relevant previous experiences, it becomes easier for them to reach flourishing outcomes. Likewise, the stronger the relationship between the coach and administrator, the coaches themselves, and relationships between teammates, it will be easier for the coach-athlete dyad to engage with relevant resources and promote goal-oriented growth. The most distal facilitators (with the most indirect impact) are the environmental resources. The more student-focused the university sport

environment is, and the more quality physical and human resources available, the more likely it is for the student-athlete and coach to be able to experience goal-oriented growth and ultimately flourish compared to environments without an athlete focus or with fewer resources.

## Appendix II. Interview Guides

### Athlete pre-season interview guide (Study 1)

#### Preamble

Thanks for agreeing to participate in this interview. As a reminder, you have been invited to participate in this interview because you have been identified as someone who experiences high levels of flourishing in sport and in life, and I'm trying to understand ways we can help other student-athletes have similar positive experiences. Flourishing is feeling good or satisfied with life and functioning well psychologically (in your own head) and socially (with others). I am interested in your thoughts, opinions, and experiences that surround the following questions. There are no right or wrong answers, and your identity will be kept confidential. You are free to withdraw at any time during or after the interview, and you do not have to answer any questions that may bring up unpleasant memories. You will receive a copy of your transcript once it has been typed up and you can remove any parts of the interview you do not want to be included in the research. As part of this research, I'm also asking for weekly journals written online during the season so I can learn more about specific events and how they impact well-being. In late November we will do a follow-up interview to talk about this interview and your journals. If you have any questions or concerns you can contact me via the email on the information letter at any time. Do you have any questions?

#### Demographic questions

[Switch recorder on] We're going to start with some background questions so I can broadly describe the people I talked to.

- How old are you?
- What year of your program are you in?
- What year of eligibility will you be in this season?
- How long have you been a member of your varsity team?
- Can you tell me about your background in [sport] and why you wanted to play at the university level?

#### Main questions

- What does flourishing mean to you?
- Can you tell me about a moment or experience in life that you look back on as helping you experience flourishing? (Repeat as necessary for more events)
  - What made that event stand out?
  - Can you explain what you thought about it then?
  - Can you explain if that's changed at all since then?
  - How does that event help you experience flourishing now?
- Can you tell me about a moment or experience in sport that you found has really helped your flourishing? (Repeat as necessary for more events)
  - What made that event stand out?
  - Can you explain what you thought about it then?

- Can you explain if that's changed at all since then?
- How does that event help you experience flourishing now?

### **Flourishing**

- What are some things you do to promote your overall flourishing during your sport season?
  - How do you think these things help you?
- What are some things you do to promote your flourishing in sport during the season?
  - How do you think these things help you?
- What are some things that you've found in the past to get in the way of your flourishing in season?
  - What are your plans to stay on top of those things this season?

### **Emotional well-being**

Now I'm going to ask some questions about specific parts of well-being for you to think about. First, I want to know what you think about emotional well-being. Emotional well-being is feeling good, or generally content with where you're at in life.

- Can you tell me what emotional well-being means to you?
- Why or why isn't it important to you?
- How do you think you promote your overall emotional well-being?
  - [If needed] How did you learn these strategies?
- [If needed] How do you promote your emotional well-being in sport? (give examples of emotional well-being in sport as needed)
  - [If needed] How did you learn these strategies?

### **Psychological well-being**

Next, I want to know what you think about psychological well-being. We can think of psychological well-being as feeling confident in who you are and what you have to offer the world.

- Can you tell me what psychological well-being means to you?
- Why or why isn't it important to you?
- How do you think you promote your overall psychological well-being?
  - [If needed] How did you learn these strategies?
- [If needed] How do you promote your psychological well-being in sport? (give examples of psychological well-being in sport as needed)
  - [If needed] How did you learn these strategies?

### **Social well-being**

Our last set of main questions is about social well-being.

- Can you tell me what social well-being means to you?
- Why or why isn't it important to you?
- How do you think you promote your overall social well-being?
  - [If needed] How did you learn these strategies?

- [If needed] How do you promote your social well-being in sport? (give examples of social well-being in sport as needed)
  - [If needed] How did you learn these strategies?

### **Concluding Questions**

That's the last of the main questions. I have two questions left to wrap things up.

- If you could relive one moment in sport or in life where you felt fully flourishing, what would it be and why?
- Do you have anything else you want to talk more about, or something you want to discuss that I didn't ask about?

**REDCap diary prompt (Study 1)**

This journal is to reflect on your experiences in and out of sport this week, and if and/or how it impacted your flourishing (feeling good or satisfied with life and your psychological and social functioning). There are five main things I would like you to think about in your writing this week:

- (1) What happened in your sport this week?
- (2) What happened in other areas of your life this week?
- (3) What were the positive things from your week?
- (4) What were challenges or stressors this week?
- (5) How, if at all, do you think these positives and challenges or stressors impacted your flourishing?

Anything written here will be confidential and kept on secure servers here at the U of A. If you have any questions or concerns please contact me at [pankow@ualberta.ca](mailto:pankow@ualberta.ca). If you have concerns about your mental health during any part of this study, please reach out to the University of Alberta Counseling Services at 780-492-5205 or see their website at <https://www.ualberta.ca/current-students/counselling/resources>.

### **Athlete post-season interview guide (Study 1)**

[*Note to REB*: This is a draft of the interview guide which contains a complete list of all the questions we plan to ask. This guide will be developed and piloted and any major changes beyond matters of format, structure, or phrasing of questions (e.g., new questions/topics) will be resubmitted to the REB].

#### **Preamble**

Thanks for agreeing to participate in this interview. As a reminder, you have been invited to participate in this interview because you have been identified as someone who experiences high levels of flourishing in sport and in life, and I'm trying to understand ways we can help other student-athletes have similar positive experiences. Flourishing is feeling good or satisfied with life and functioning well psychologically (in your own head) and socially (with others). I am interested in your thoughts, opinions, and experiences that surround the following questions. There are no right or wrong answers, and your identity will be kept confidential. You are free to withdraw at any time during or after the interview, and you do not have to answer any questions that may bring up unpleasant memories. You will receive a copy of your transcript once it has been typed up and you can remove any parts of the interview you do not want to be included in the research. If you have any questions or concerns you can contact me via the email on the information letter at any time. Do you have any questions?

#### **Main questions**

[Switch recorder on]

- How do you feel about this past season personally (i.e., from a non-sport perspective)?
- How do you feel about this past season from an athletic perspective?
- What were some of the highlights from this season for you?
  - Can you explain how, if at all, this promoted your flourishing?
- What were some things you struggled with this season?
  - How did you promote your flourishing when you faced these challenges?
- Do you think the weekly diaries had any impact on your flourishing, positively or negatively? Why or why not?

#### **Emotional well-being**

Now I'm going to ask some questions about specific parts of well-being for you to think about. We'll start with emotional well-being.

- Can you tell me what impacted your sense of feeling good or content with life this season?
  - How do you think you managed your overall emotional well-being this season?
  - How do you think you managed your emotional well-being in sport this season?

#### **Psychological well-being**

Next, I want to talk about your psychological well-being this season.

- Can you tell me what impacted your psychological well-being this season?
  - How do you think you managed your overall psychological well-being this season?

- How do you think you managed your psychological well-being in sport this season?

### **Social well-being**

Our last set of main questions is about social well-being.

- Can you tell me what impacted your social well-being this season?
  - How do you think you managed your overall social well-being this season?
  - How do you think you managed your social well-being in sport this season?

### **Concluding Questions**

That's the last of the main questions. I have two questions left to wrap things up.

- What was the most important moment for your flourishing this year, positive or negative, and why was it important?
- Do you have anything else you want to talk more about, or something you want to discuss that I didn't ask about?

## **Coach interview guide (Study 2)**

### **Preamble**

Thanks for agreeing to participate in this interview. As a reminder, you have been invited to participate in this interview because you have been identified as someone who experiences high levels of flourishing in sport and in life, and I'm trying to understand ways we can help other coaches have similar positive experiences. Flourishing is feeling good or satisfied with life and functioning well psychologically (in your own head) and socially (with others). I am interested in your thoughts, opinions, and experiences that surround the following questions. There are no right or wrong answers, and your identity will be kept confidential. You are free to withdraw at any time during or after the interview, and you do not have to answer any questions that may bring up unpleasant memories. You will receive a copy of your transcript once it has been typed up and you can remove any parts of the interview you do not want to be included in the research. If you have any questions or concerns you can contact me via the email on the information letter at any time. Do you have any questions?

### **Demographic questions**

[Switch recorder on] We're going to start with some background questions so I can broadly describe the people I talked to.

- How old are you?
- How many years have you coached university sport?
- How many seasons have you coached with this team?
- How many seasons have you been a head coach?
- Can you tell me about your background in [sport] and why you wanted to coach at the university level?

### **Main questions**

- What does flourishing mean to you?
- Do you think it's important for coaches to flourish?
  - Do you think flourishing has an impact on your coaching? Why/why not?
  - Do you think flourishing has an impact on your athletes? Why/why not?
- Can you tell me about something in your life that you think helps you flourish? (Repeat as necessary)
- Can you tell me about a moment or experience in life that you look back on as helping you experience flourishing? (Repeat as necessary for more events)
  - What made that event stand out?
  - Can you explain what you thought about it then?
  - Can you explain if that's changed at all since then?
  - How does that event help you experience flourishing now?
- Can you tell me about a moment or experience in sport that you found has really helped your flourishing? (Repeat as necessary for more events)
  - What made that event stand out?
  - Can you explain what you thought about it then?

- Can you explain if that's changed at all since then?
- How does that event help you experience flourishing now?

### **Flourishing**

- What are some things you do to promote your overall flourishing during your sport season?
  - How do you think these things help you?
- What are some things you do to promote your flourishing in sport during the season?
  - How do you think these things help you?
- What are some things that you've found in the past to get in the way of your flourishing in season?
  - What are your plans to stay on top of those things this season?

### **Emotional well-being**

Now I'm going to ask some questions about specific parts of well-being for you to think about. First, I want to know what you think about emotional well-being. Emotional well-being is feeling good, or generally content with where you're at in life.

- Can you tell me what emotional well-being means to you?
- Why or why isn't it important to you?
- How do you think you promote your overall emotional well-being?
  - [If needed] How did you learn these strategies?
- [If needed] How do you promote your emotional well-being in sport? (give examples of emotional well-being in sport as needed)
  - [If needed] How did you learn these strategies?

### **Psychological well-being**

Next, I want to know what you think about psychological well-being. We can think of psychological well-being as feeling confident in who you are and what you have to offer the world.

- Can you tell me what psychological well-being means to you?
- Why or why isn't it important to you?
- How do you think you promote your overall psychological well-being?
  - [If needed] How did you learn these strategies?
- [If needed] How do you promote your psychological well-being in sport? (give examples of psychological well-being in sport as needed)
  - [If needed] How did you learn these strategies?

### **Social well-being**

Our last set of main questions is about social well-being.

- Can you tell me what social well-being means to you?
- Why or why isn't it important to you?
- How do you think you promote your overall social well-being?
  - [If needed] How did you learn these strategies?

- [If needed] How do you promote your social well-being in sport? (give examples of social well-being in sport as needed)
  - [If needed] How did you learn these strategies?

### **Concluding Questions**

That's the last of the main questions. I have two questions left to wrap things up.

- If you could make one change to university sport to help more coaches flourish, what would it be and why?
- Do you have anything else you want to talk more about, or something you want to discuss that I didn't ask about?

## **Athlete and coach interview guide (Study 3)**

### **Preamble**

Thanks for agreeing to participate in this interview. I'm doing these interviews to try and understand how athletes and coaches come to flourish through university sport. Flourishing is feeling good or satisfied with life and functioning well psychologically (in your own head) and socially (with others). I am interested in your thoughts, opinions, and experiences that surround the following questions. There are no right or wrong answers, and your identity will be kept confidential. You are free to withdraw at any time during or after the interview, and you do not have to answer any questions that may bring up unpleasant memories. You will receive a copy of your transcript once it has been typed up and you can remove any parts of the interview you do not want to be included in the research. If you have any questions or concerns you can contact me via the email on the information letter at any time. Do you have any questions?

### **Demographic questions**

[Switch recorder on] We're going to start with some background questions so I can broadly describe the people I talked to.

- How old are you?
- How many years have you played your sport?
- Do you remember why you started playing?
- How many seasons have you played with this team?
- Can you tell me about your background in [sport] and why you wanted to play at the university level?

### **Main questions**

#### **Flourishing**

Again, flourishing is that idea of feeling good or satisfied with life and functioning well psychologically (in your own head) and socially (with others). Flourishing is part of mental health, which is related to but separate from mental illness.

- Those are the academic ways of thinking about flourishing, but what does flourishing mean to you?
- Some people think that you can flourish in different areas of your life, and it feeds into an "overall" flourishing. What do you think of that?
- Do you think it's important for athletes to flourish?
  - Do you think flourishing has an impact on your performance? Why/why not?
- In your opinion, how would I identify a flourishing athlete?

#### **Changes**

- How would you describe your flourishing now?
- How would you describe your flourishing when you entered university?
- [If different] What experiences influenced this change?

#### **Individual**

- Can you describe a specific thing you do to promote your flourishing?
  - [Repeat as necessary for other strategies/behaviours]

- Can you describe a stressful situation you've faced where you've felt like your flourishing was threatened?
  - How did you respond?
  - Did you find it helped or hurt to respond that way?
- How did you learn the things that helped you flourish?
- How has sport helped you flourish in other areas of your life?

### **Relational**

- What kind of impact do the people in your life have on your flourishing?
- What kind of impact does your coach have on your flourishing?
  - What sorts of things do they do that impacts your flourishing?
- What kind of impact does your teammates have on your flourishing?
  - What sorts of things do they do that impacts your flourishing?
- [Repeat for other important people as necessary]
- What do you think your role is in helping your coach and teammates flourish?

### **Environmental**

- What does a typical week look like in-season for you?
- What does a typical week look like in the off-season for you during school?
  - What about over the summer?
- What are some things in these environments that you think promotes your flourishing?
- Are there any environmental things that get in the way of your flourishing?
- What would you like to see your athletic department or university offer athletes to help promote their flourishing?
- What would you like to see your athletic department or university offer athletes to help protect their flourishing?

### **Closing questions**

- If you could make one change to university sport to help more coaches and athletes flourish, what would it be and why?
- Is there anything I've asked about you'd like to talk more about, or something I didn't ask about you'd like to bring up right now?

### **Admin/support staff interview guide (Study 3)**

#### **Preamble**

Thanks for agreeing to participate in this interview. I'm doing these interviews to try and understand how athletes and coaches come to flourish through university sport. Flourishing is feeling good or satisfied with life and functioning well psychologically (in your own head) and socially (with others). I am interested in your thoughts, opinions, and experiences that surround the following questions. There are no right or wrong answers, and your identity will be kept confidential. You are free to withdraw at any time during or after the interview, and you do not have to answer any questions that may bring up unpleasant memories. You will receive a copy of your transcript once it has been typed up and you can remove any parts of the interview you do not want to be included in the research. If you have any questions or concerns you can contact me via the email on the information letter at any time. Do you have any questions?

#### **Demographics**

[Switch recorder on] We're going to start with some background questions so I can broadly describe the people I talked to.

- How old are you?
- How many years have you been in your current role?
- How many years have you been involved with university sport?
- Can you tell me about your background in sport and why you wanted to be involved at the university level?

#### **Main Questions**

##### **General Structure and Role**

- What is the structure and aim of your department or program as it relates to athletes?
- What is your involvement with athletes?
- What is the structure and aim of your department or program as it relates to coaches?
- What is your involvement with coaches?

##### **Flourishing**

- Flourishing is described as being emotionally, psychologically, and socially well. Flourishing is part of mental health, which is related to but separate from mental illness. But that's the academic way of thinking about it. What does flourishing mean to you?
- How would you identify a flourishing athlete?
- How is your role related to athletes' flourishing?
- How would you identify a flourishing coach?
- How is your role related to coach flourishing?
- Some people think flourishing can be developed. What do you think of that?

##### **Environment**

- What sort of things need to be in place at a department level to develop/support flourishing among athletes?
  - What programs or support do you currently have that you think promote athletes' flourishing?

- What sort of things need to be in place at a department level to develop/support flourishing among coaches?
  - What programs or support do you currently have that you think promote athletes' flourishing?
- What role does the broader university community play in supporting the flourishing of athletes?
- What role does the broader university community play in supporting the flourishing of athletes?
- Are there other things you think are important to support athletes and coaches in flourishing?

#### **Closing questions**

- If you could make one change to university sport to help more coaches and athletes flourish, what would it be and why?
- Is there anything I've asked about you'd like to talk more about, or something I didn't ask about you'd like to bring up right now?

### Appendix III. Information Letters and Informed Consent Forms

#### Study 1

*Study Title:* A Qualitative Season-Long Examination of Flourishing among Canadian University Student-Athletes

Investigator:	Supervisor:
Kurtis Pankow Child and Adolescent Sport and Activity Lab Faculty of Kinesiology, Sport, and Recreation University of Alberta Tel: (780) 492-9296 E-mail: pankow@ualberta.ca	Dr. Nicholas L. Holt Professor and Associate Dean – Research Faculty of Kinesiology, Sport, and Recreation University of Alberta Tel: (780) 492-7386 E-mail: nick.holt@ualberta.ca

Hello,

We are conducting a study to examine flourishing (i.e., a state of well-being that is to be “filled with positive emotion, and to be functioning well psychologically and socially” Keyes, 2002, p. 210) university student-athletes experiences of their USports season. The first step in this study is completing the following survey through the University of Alberta’s REDCap secure system. You may be contacted to participate further based on the survey results.

If you are contacted to participate further, you will be invited to complete an individual interview lasting approximately 30-60 minutes. You will be asked about your thoughts and experiences pertaining to your flourishing in life and in sport. The interview will be with Kurtis Pankow at either the Child and Adolescent Sport and Activity lab on the University of Alberta campus, or a location of your convenience. Phone or Skype interviews may also be arranged if an in-person meeting is not possible.

Interviews will be audio recorded. These recordings will be transcribed verbatim and a copy of your transcript will be sent to you. You will be able to remove any information you do not want included in the study, clarify meaning, and further elaborate on any point.

You will also be asked to complete weekly journals (5-15 minutes per entry) during the season about events and experiences that impact your flourishing. These will be collected online and stored on a secure computer at the U of A.

You will be invited to participate in a final interview (approximately 20-40 minutes) in November or December, following the completion of your season. The interview will be with Kurtis Pankow at either the Child and Adolescent Sport and Activity lab on the University of Alberta campus.

Therefore, the total time commitment for this study is **approximately 105-235 minutes**.

#### Benefits

There are no direct benefits to you as an individual. However, the information you provide may help to identify and improve current practices associated with student-athlete mental health in USports competition.

**Risks**

It is highly unlikely there are any risks associated with this study. However, if any question makes you uncomfortable in any way, you do not have to answer it. If at any time during the interview you want to stop, you may inform the interviewer and the interview will stop. If you have concerns about your mental health during any part of this study, please reach out to the University of Alberta Counseling Services at 780-492-5205 or see their website at <https://www.ualberta.ca/current-students/counselling/resources>.

**Freedom to Withdraw**

Participation in this study is completely voluntary. This means that you do not have to participate in the study. There are no negative consequences if you choose not to participate. All of your data, including personal contact information, will be deleted upon request within four weeks of your final interview. If you wish to withdraw from the study, please contact Kurtis Pankow within four weeks after your final interview.

**Anonymity and Confidentiality**

Following the transcription of the interview's audio recording, any personal information will be removed, and all names will be replaced with pseudonyms. Any information that you provide will remain confidential. All electronic interview data will be stored on a password protected computer within a locked office. Hard copies of data will be securely stored in a locked file cabinet within a locked office. Journal data will be stored on the secured REDCap system here at the U of A. Only the researcher team will have access to the data collected. The data will be kept for five years post publication, after which everything will be destroyed. Once we have finished the study we will present the results at conferences and in an academic journal. No identifying information (e.g., names, locations) will be included in any results presented.

This study has been approved by the University of Alberta Research Ethics Board.

Any questions you may have about this study may be directed to Kurtis Pankow by email ([pankow@ualberta.ca](mailto:pankow@ualberta.ca)). Questions about your rights as a research participant may be directed to the University of Alberta Research Ethics Office at (780) 492-2615. This office has no direct involvement with this project.

If you would like to participate in this study, please contact Kurtis Pankow at

[pankow@ualberta.ca](mailto:pankow@ualberta.ca)

Many thanks,

Kurtis Pankow  
Faculty of Kinesiology, Sport, and Recreation  
University of Alberta

*Study Title: A Qualitative Season-Long Examination of Flourishing among Canadian University Student-Athletes*

Investigator:	Supervisor:
Kurtis Pankow Child and Adolescent Sport and Activity Lab Faculty of Kinesiology, Sport, and Recreation University of Alberta Tel: (780) 492-9296 E-mail: pankow@ualberta.ca	Dr. Nicholas L. Holt Professor and Associate Dean – Research Faculty of Kinesiology, Sport, and Recreation University of Alberta Tel: (780) 492-7386 E-mail: nick.holt@ualberta.ca

Hello,

Based on your results from the survey you completed earlier this month regarding your flourishing, you have been invited to participate further in this study. Continued participation involves two interviews and weekly journals. Interviews will be audio recorded. These recordings will be transcribed verbatim and a copy of your transcript will be sent to you. You will be able to remove any information you do not want included in the study as well as clarify or expand on anything you wish.

The first interview will last approximately 30-60 minutes before the start of your season. You will be asked about your thoughts and experiences pertaining to your flourishing in life and in sport. The interview will be with Kurtis Pankow at the Child and Adolescent Sport and Activity lab on the University of Alberta campus. Phone interviews can be arranged if an in-person meeting is not possible.

You will also be asked to complete weekly journals (5-15 minutes per entry) during the season about events and experiences that impact your flourishing. These will be collected online and stored on a secure computer at the U of A.

You will be invited to participate in a final interview (approximately 20-40 minutes) in November or December, following the completion of your season. The interview will be with Kurtis Pankow at either the Child and Adolescent Sport and Activity lab on the University of Alberta campus or over the phone.

Therefore, the total time commitment for this study is **approximately 1.75-4 hours**.

### **Benefits**

There are no direct benefits to you as an individual. However, the information you provide may help to identify and improve current practices associated with student-athlete mental health in USports competition.

### **Risks**

It is highly unlikely there are any risks associated with this study. However, if any question makes you uncomfortable in any way, you do not have to answer it. If at any time during the interview you want to stop, you may inform the interviewer and the interview will stop. If you have concerns about your mental health during any part of this study, please reach out to the

University of Alberta Counseling Services at 780-492-5205 or see their website at <https://www.ualberta.ca/current-students/counselling/resources>.

### **Freedom to Withdraw**

Participation in this study is completely voluntary. This means that you do not have to participate in the study. There are no negative consequences if you choose not to participate. All of your data, including personal contact information, will be deleted upon request within four weeks of your final interview. If you wish to withdraw from the study, please contact Kurtis Pankow within four weeks after your final interview.

### **Anonymity and Confidentiality**

Following the transcription of the interview's audio recording, any personal information will be removed, and all names will be replaced with pseudonyms. Any information that you provide will remain confidential. All electronic interview data will be stored on a password protected computer within a locked office. Hard copies of data will be securely stored in a locked file cabinet within a locked office. Journal data will be stored on the secured REDCap system here at the U of A. Only the researcher team will have access to the data collected. The data will be kept for five years post publication, after which everything will be destroyed. Once we have finished the study we will present the results at conferences, in an academic journal, and a thesis. No identifying information (e.g., names, locations) will be included in any results presented.

Any questions you may have about this study may be directed to Kurtis Pankow by email ([pankow@ualberta.ca](mailto:pankow@ualberta.ca)). The plan for this study has been reviewed by a Research Ethics Board at the University of Alberta ID (Pro00091372). If you have questions about your rights or how research should be conducted, you can call (780) 492-2615. This office is independent of the researchers.

If you would like to participate in this study, please contact Kurtis Pankow at [pankow@ualberta.ca](mailto:pankow@ualberta.ca)

Many thanks,

Kurtis Pankow  
Faculty of Kinesiology, Sport, and Recreation  
University of Alberta

### Informed Consent Form

Title of Project: A Qualitative Season-Long Examination of Mental Well-Being among Canadian University Student-Athletes		
Investigator:	Supervisor:	
Kurtis Pankow Child and Adolescent Sport and Activity Lab Faculty of Kinesiology, Sport, and Recreation University of Alberta Tel: (780) 492-9296 E-mail: pankow@ualberta.ca	Dr. Nicholas L. Holt Professor and Associate Dean – Research Faculty of Kinesiology, Sport, and Recreation University of Alberta Tel: (780) 492-7386 E-mail: nick.holt@ualberta.ca	
Do you understand that you have been asked to take part in a research study?	Yes	No
Have you read and received a copy of the attached information letter?	Yes	No
Do you understand the benefits and risks involved in taking part in this research study?	Yes	No
Do you understand that you are free to contact the researcher to ask questions and discuss this study?	Yes	No
Do you understand that you are free to refuse participation, or to withdraw from the study up to four weeks after your interview?	Yes	No
Do you understand the issues of confidentiality and do you understand who will have access to your information?	Yes	No

I agree to take part in this study:

YES

NO

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Name of researcher: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## Study 2

*Study Title:* The development of flourishing among Canadian university sport coaches

Investigator:	Supervisor:
Kurtis Pankow Child and Adolescent Sport and Activity Lab Faculty of Kinesiology, Sport, and Recreation University of Alberta Tel: (780) 492-9296 E-mail: pankow@ualberta.ca	Dr. Nicholas L. Holt Professor and Vice Dean Faculty of Kinesiology, Sport, and Recreation University of Alberta Tel: (780) 492-7386 E-mail: nick.holt@ualberta.ca

Hello,

We are conducting a study to examine flourishing (i.e., a state of well-being that is to be “filled with positive emotion, and to be functioning well psychologically and socially” Keyes, 2002, p. 210) among university coaches. The first step in this study is completing the following surveys through the University of Alberta’s REDCap secure system. This will ask questions about your flourishing (e.g., How often in the past month did you feel happy) and flourishing in sport (e.g., How often in the past month did your sport participation make you feel happy). You may be contacted to participate further based on the survey results. The survey should take **approximately 10 minutes**.

### Benefits

There are no direct benefits to you as an individual. However, the information you provide may help to identify and improve current practices associated with coach mental health in USports competition.

### Risks

It is highly unlikely there are any risks associated with this study. However, if any question makes you uncomfortable in any way, you do not have to answer it. If you have concerns about your mental health during any part of this study, please reach out to the University of Alberta Counseling Services at 780-492-5205 or see their website at <https://www.ualberta.ca/current-students/counselling/resources>.

### Freedom to Withdraw

Participation in this study is completely voluntary. This means that you do not have to participate in the study. There are no negative consequences if you choose not to participate. All of your data may be removed from the study by contacting Kurtis Pankow within four weeks of completing your survey.

### Anonymity and Confidentiality

Any identifying information will be removed from the survey. All survey data will be stored on the secured REDCap system here at the U of A. Only the researcher team will have access to the data collected. All survey data will be deleted four weeks following the completion of interviews. The interview data will be kept for five years post publication, after which everything will be destroyed. Once we have finished the study we will present the interview results at

conferences, in an academic journal, and a thesis. No identifying information (e.g., names, locations) will be included in any results presented.

Any questions you may have about this study may be directed to Kurtis Pankow by email (pankow@ualberta.ca). The plan for this study has been reviewed by a Research Ethics Board at the University of Alberta ID (Pro00096680). If you have questions about your rights or how research should be conducted, you can call (780) 492-2615. This office is independent of the researchers.

If you would like to participate in this study,  
please continue to complete the surveys through the link in this email.

Many thanks,

Kurtis Pankow  
Faculty of Kinesiology, Sport, and Recreation  
University of Alberta

*Study Title:* The development of flourishing among Canadian university sport coaches

Investigator:	Supervisor:
Kurtis Pankow Child and Adolescent Sport and Activity Lab Faculty of Kinesiology, Sport, and Recreation University of Alberta Tel: (780) 492-9296 E-mail: pankow@ualberta.ca	Dr. Nicholas L. Holt Professor and Vice Dean Faculty of Kinesiology, Sport, and Recreation University of Alberta Tel: (780) 492-7386 E-mail: nick.holt@ualberta.ca

Hello,

Based on your results from the survey you completed earlier this month regarding your flourishing, you have been invited to participate further in this study. Continued participation involves one interview. Interviews will be audio recorded. These recordings will be transcribed verbatim and a copy of your transcript will be sent to you. You will be able to remove any information you do not want included in the study as well as clarify or expand on anything you wish.

The interview will last approximately 30-60 minutes and take place between January and May of 2020. You will be asked about your thoughts and experiences pertaining to your flourishing in life and in sport. The interview will be with Kurtis Pankow at the Child and Adolescent Sport and Activity lab on the University of Alberta campus. Phone interviews can be arranged if an in-person meeting is not possible.

You will be given the opportunity to review your transcripts, which could take between 15 and 30 minutes.

Therefore, the total time commitment for this study is **approximately 0.75-1.5 hours**.

### **Benefits**

There are no direct benefits to you as an individual. However, the information you provide may help to identify and improve current practices associated with coach mental health in USports competition.

### **Risks**

It is highly unlikely there are any risks associated with this study. However, if any question makes you uncomfortable in any way, you do not have to answer it. If at any time during the interview you want to stop, you may inform the interviewer and the interview will stop. If you have concerns about your mental health during any part of this study, please reach out to the University of Alberta Counseling Services at 780-492-5205 or see their website at <https://www.ualberta.ca/current-students/counselling/resources>.

### **Freedom to Withdraw**

Participation in this study is completely voluntary. This means that you do not have to participate in the study. There are no negative consequences if you choose not to participate. All of your data, including personal contact information, will be deleted upon request within four weeks of

your final interview. If you wish to withdraw from the study, please contact Kurtis Pankow within four weeks after your final interview.

### **Anonymity and Confidentiality**

Following the transcription of the interview's audio recording, any personal information will be removed, and all names will be replaced with pseudonyms. Any information that you provide will remain confidential. All electronic interview data will be stored on a password protected computer within a locked office. Hard copies of data will be securely stored in a locked file cabinet within a locked office. Only the researcher team will have access to the data collected. The data will be kept for five years post publication, after which everything will be destroyed. Once we have finished the study we will present the results at conferences, in an academic journal, and a thesis. No identifying information (e.g., names, locations) will be included in any results presented.

Any questions you may have about this study may be directed to Kurtis Pankow by email ([pankow@ualberta.ca](mailto:pankow@ualberta.ca)). The plan for this study has been reviewed by a Research Ethics Board at the University of Alberta ID (Pro00096680). If you have questions about your rights or how research should be conducted, you can call (780) 492-2615. This office is independent of the researchers.

If you would like to participate in this study, please contact Kurtis Pankow at [pankow@ualberta.ca](mailto:pankow@ualberta.ca)

Many thanks,  
Kurtis Pankow  
Faculty of Kinesiology, Sport, and Recreation  
University of Alberta

## Informed Consent Form

Title of Project: The Development of Flourishing among Canadian University Coaches		
Investigator:	Supervisor:	
Kurtis Pankow Child and Adolescent Sport and Activity Lab Faculty of Kinesiology, Sport, and Recreation University of Alberta Tel: (780) 492-9296 E-mail: pankow@ualberta.ca	Dr. Nicholas L. Holt Professor and Vice Dean Faculty of Kinesiology, Sport, and Recreation University of Alberta Tel: (780) 492-7386 E-mail: nick.holt@ualberta.ca	
Do you understand that you have been asked to take part in a research study?	Yes	No
Have you read and received a copy of the attached information letter?	Yes	No
Do you understand the benefits and risks involved in taking part in this research study?	Yes	No
Do you understand that you are free to contact the researcher to ask questions and discuss this study?	Yes	No
Do you understand that you are free to refuse participation, or to withdraw from the study up to four weeks after your interview, without consequence?	Yes	No
Do you understand the issues of confidentiality and do you understand who will have access to your information?	Yes	No

I agree to take part in this study:

YES

NO

Name:

\_\_\_\_\_

Signature:

\_\_\_\_\_

Date:

\_\_\_\_\_

Name of researcher:

\_\_\_\_\_

Signature:

\_\_\_\_\_

Date:

\_\_\_\_\_

### Study 3

*Study Title: A Grounded Theory of Flourishing in Canadian University Sport*

Investigator:	Supervisor:
Kurtis Pankow Child and Adolescent Sport and Activity Lab Faculty of Kinesiology, Sport, and Recreation University of Alberta Tel: (780) 492-9296 E-mail: pankow@ualberta.ca	Dr. Nicholas L. Holt Professor and Vice Dean Faculty of Kinesiology, Sport, and Recreation University of Alberta Tel: (780) 492-7386 E-mail: nick.holt@ualberta.ca

Hello,

We are conducting a study to examine how university sport can help promote and support positive mental health among student-athletes and coaches. Specifically, we are examining flourishing, which is considered being emotionally, psychologically, and socially well. You are invited to participate in this study based on your involvement in USports competition. *No one will be informed if choose not to participate.*

If you choose to participate in this study, you will be invited to complete an individual interview lasting approximately 30-60 minutes. You will be asked about your thoughts and experiences pertaining to flourishing in life and in sport. The interview will be with Kurtis Pankow over the phone or using secure Skype for Business software.

Interviews will be audio recorded. These recordings will be transcribed verbatim and a copy of your transcript will be sent to you. You will be able to remove any information you do not want included in the study, clarify meaning, and further elaborate on any point (this will take approximately 15 minutes).

Therefore, the total time commitment for this study is **approximately 45-75 minutes.**

#### **Benefits**

There are no direct benefits to you as an individual. However, the information you provide may help to identify and improve current policies and programs associated with student-athlete and coach mental health in USports competition.

#### **Risks**

It is highly unlikely there are any risks associated with this study. However, if any question makes you uncomfortable in any way, you do not have to answer it. If at any time during the interview you want to stop, you may inform the interviewer and the interview will stop.

#### **Freedom to Withdraw**

Participation in this study is completely voluntary. This means that you do not have to participate in the study. There are no negative consequences if you choose not to participate. All of your data, including personal contact information, will be deleted upon request. If you wish to withdraw from the study, please contact Kurtis Pankow within four weeks after your initial interview.

**Anonymity and Confidentiality**

Following the transcription of the interview's audio recording, any personal information will be removed, and all names will be replaced with pseudonyms. Any information that you provide will remain confidential. All electronic interview data will be stored on a password protected computer within a locked office. Hard copies of data will be securely stored in a locked file cabinet within a locked office. Only the researcher and the supervisory committee will have access to the data collected. The data will be kept for five years post publication, after which everything will be destroyed. Once we have finished the study we will present the results at conferences and in an academic journal. No identifying information (e.g., names, locations) will be included in any results presented in academic settings.

This study has been approved by the University of Alberta Research Ethics Board (Pro 00103403). Any questions you may have about this study may be directed to Kurtis Pankow by email ([pankow@ualberta.ca](mailto:pankow@ualberta.ca)). Questions about your rights as a research participant may be directed to the University of Alberta Research Ethics Office at (780) 492-2615. This office has no direct involvement with this project.

If you would like to participate in this study, please contact Kurtis Pankow at [pankow@ualberta.ca](mailto:pankow@ualberta.ca)

Many thanks,

Kurtis Pankow  
Faculty of Kinesiology, Sport, and Recreation  
University of Alberta

## Informed Consent Form

Title of Project: A Grounded Theory of Flourishing in Canadian University Sport		
Investigator:	Supervisor:	
Kurtis Pankow Child and Adolescent Sport and Activity Lab Faculty of Kinesiology, Sport, and Recreation University of Alberta Tel: (780) 492-9296 E-mail: pankow@ualberta.ca	Dr. Nicholas L. Holt Professor and Vice Dean Faculty of Kinesiology, Sport, and Recreation University of Alberta Tel: (780) 492-7386 E-mail: nick.holt@ualberta.ca	
Do you understand that you have been asked to take part in a research study?	Yes	No
Have you read and received a copy of the attached information letter?	Yes	No
Do you understand the benefits and risks involved in taking part in this research study?	Yes	No
Do you understand that you are free to contact the researcher to ask questions and discuss this study?	Yes	No
Do you understand that you are free to refuse participation, or to withdraw from the study up to four weeks after your interview, without consequence?	Yes	No
Do you understand the issues of confidentiality and do you understand who will have access to your information?	Yes	No
	YES	NO

I agree to take part in this study:

Name: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Name of researcher: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_