UNDERSTANDING INTRAPERSONAL KNOWLEDGE IN SUCCESSFUL FEMALE CANADIAN UNIVERSITY COACHES

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Abstract

Intrapersonal knowledge is a component of coaching knowledge that concerns the understanding of oneself and the use of introspection (Côté & Gilbert, 2009). Although intrapersonal knowledge is a key component of coaching expertise and effectiveness (Côté & Gilbert, 2009; Gilbert & Côté, 2013), previous evaluations of coaching effectiveness have primarily focused on professional and interpersonal knowledge. In order to gain insight into the development, application, and perceived benefits of intrapersonal knowledge, semi-structured interviews were conducted with six experienced female university team sport coaches. Interviews were transcribed verbatim, and a thematic analysis was used to organize data into themes and subthemes, as well as to provide a complete understanding of each experience (Sparkes & Smith, 2014). Results revealed coaches developed and applied intrapersonal techniques such as reflection, and valued continuous learning especially with guidance from a mentor. Daily reflection was cited by all coaches as an important process for learning and self-improving. The frequency and depth of reflections varied depending on the time of the season. Lifelong learning process was underpinned by high self-awareness and high emotional intelligence, which was evidenced by adopting an individualistic approach when coaching different athletes. All of the coaches used help from a mentor to gain sport-specific knowledge, as well as improving emotional intelligence and dealing with the coaching lifestyle. The use of reflection, and self-awareness (intrapersonal), in order to deal with their athletes (interpersonal), as well as their interactions with a mentor (interpersonal) to improve emotional intelligence (intrapersonal), supports evidence for the interconnectedness of different types of coaching knowledge (Gilbert & Côté, 2013). Additionally, the present results identified the demands and stressors coaches regularly face, and the common symptoms and consequences of these stressors. Three of the six coaches expressed some symptoms of burnout or depression at one point in their career. Developing intrapersonal knowledge and self-awareness could thus serve multiple purposes by improving coaching effectiveness, but also help detect symptoms of stress before they lead to more serious illness such as burnout and depression.

Résumé

Les connaissances intrapersonelles concernent la compréhension de soi et l'introspection (Côté & Gilbert, 2009). Les connaissances intrapersonelles professionnelles et interpersonnelles sont les trois composantes des connaissances de coaching. Bien que la définition de l'expertise et de l'efficacité de l'entraîneur proposée par Côté & Gilbert (2009) inclue les connaissances intrapersonelles, les recherches passées se sont principalement concentrées sur les connaissances professionnelles et interpersonelles de l'entraineur. Afin d'en apprendre d'avantage au sujet du développement, de l'application, ainsi que des bienfaits des connaissances intrapersonnelles, six entraîneurs universitaires féminins ont été interviewé Les entrevues ont été transcrites verbatim et une analyse thématique a été utilisé afin d'organiser les données en thèmes et sous-thèmes dans le but de fournir une meilleure compréhension de l'expérience de ces participantes (Sparkes & Smith, 2014). Les résultats ont révélés que les entraîneurs ont développées et appliquées des techniques intrapersonnelles telles que la réflexion, et valorisent l'apprentissage continue et ceci, avec l'aide d'un mentor. Toutes les entraineurs ont mentionné l'importance d'être autoréflexif durant un processus d'apprentissage afin de s'amélioration sur un niveau personnel. La fréquence et profondeur des réflexions variaient dépendamment du moment de la saison. Le processus d'apprentissage continuel à long terme des entraineurs fut démontré par une conscience de soi élevée ainsi que par un haut niveau d'intelligence émotionnelle. Ceci a été observé par l'approche individualiste de l'entraineur avec différents athlètes. Toutes les entraîneurs utilisaient l'aide d'un mentor non seulement afin d'apprendre des notions spécifiques de leur sport, mais aussi afin de développer leur intelligence émotionnelle, l'engagement autoréflexive, la conscience de soi ainsi que les interactions avec leurs mentors pour développer l'intelligence émotionnelle, supporte les preuves de l'interconnexion des différents types de connaissances de l'entraineur (Gilbert & Côté, 2013). Additionnellement, cette recherche a exploré d'avantage les différents stress que les entraineurs rencontrent, ainsi que les symptômes communs et les conséquences du stress. À un point dans leur carrière, trois des six participantes ont développé des symptômes de burnout ou de dépression. Développer des connaissances intrapersonnelles et la conscience de soi pourraient donc servir multiples fonctions. En effet, cela pourrait améliorer non seulement l'efficacité de l'entraineurs, mais aussi assister à la détection des symptômes associés au stress avant que des maladies, telles que le burnout et la dépression, apparaissent.

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Chapter 1

Introduction

Over the last three decades, there has been a substantial growth and interest in the field of coaching science (Potrac, Denison, & Gilbert, 2013). In fact, 48 coaching research articles were published between 1970-1979 compared to 309 between 1990-1999 (Gilbert, 2002). Furthermore, Gilbert (2002) created a coaching science annotated bibliography that looked into coaching behaviours and thought processes, coaches' personal characteristics, and coaching philosophies or preferences. Among the conclusions, there was no universal measure of coaching expertise used by researchers, and there was a need to further reduce the theory to practice gap in order to inform coach education (Gilbert, 2002). Since then, 336 articles were published between 2001 and 2008 (Rangeon, Gilbert, & Bruner, 2012), indicating that coaching science research has improved greatly by addressing the gaps and creating formal definitions, including for coaching expertise (Côté, Young, North, & Duffy, 2007).

Defining coaching effectiveness and expertise has been critical for the advancement of coaching science research (Côté et al., 2007; Gilbert, 2002). A great deal of research on expert coaches has relied strictly on years of experience and/or performance records, even though no evidence suggests these are the only or most valid variables to identify and evaluate an expert coach (Côté & Gilbert, 2009). To that end, Côté and Gilbert (2009) proposed an integrative definition of coaching effectiveness and expertise that was conceptually grounded in the coaching, teaching, positive psychology, and athlete development literature. More specifically, Côté and Gilbert (2009) specified coaching expertise as: "The consistent application of integrated, professional, interpersonal, and intrapersonal knowledge to improve athletes' competence, confidence, connection, and character in specific coaching contexts" (p. 316). Three

underlying components shaped this definition: (a) athlete's outcome, (b) coaching contexts, and (c) coaches' knowledge (Côté & Gilbert, 2009). Athletes' outcome is measured by the variables of competence, confidence, connection, and character/caring. Coaching context refers to the unique settings in which coaches aspire to improve their athletes' outcomes. Coaching effectiveness should be defined according to how coaches meet their athletes' needs and help them fulfill their goals, which vary greatly depending on the specific coaching context (Côté & Gilbert, 2009). Coaches' knowledge is comprised of professional, interpersonal, and intrapersonal components (Côté & Gilbert, 2009).

Professional knowledge includes tactical and strategic components of the sport, sport specific knowledge, and pedagogical knowledge (Côté & Gilbert, 2009). More precisely, professional skills include planning, decision making, and problem solving (Gilbert & Côté, 2013). Coaching effectiveness depends on more than professional knowledge alone. Additionally, it depends on individual and group interactions, through interpersonal knowledge. More specifically, interpersonal knowledge consists of individual and group interactions with athletes, assistant coaches, parents, and other professionals (Côté & Gilbert, 2009). These regular interactions can include team meetings, coaching staff meetings, or communication with individual athletes on and off the court. Continuously developing interpersonal knowledge as a coach is crucial to communicate appropriately and effectively with their athletes and support staff (Côté & Gilbert, 2009). However, intrapersonal knowledge is also a contributing component to coaching expertise. Intrapersonal knowledge concerns the understanding of oneself (self-awareness) and the use of introspection (Côté & Gilbert, 2009). Coach education programs primarily focus on professional, and somewhat interpersonal types of knowledge

(Gilbert & Côté, 2013; Lefebvre, Evans, Turnnidge, Gainforth, & Côté, 2016). In turn, little is known concerning how coaches acquire and can develop their intrapersonal knowledge.

Coaches acquire knowledge from a number of different sources, by means of formal and informal learning pathways (Cushion & Nelson, 2013; Fairhurst, Bloom, & Harvey, 2017; Mallett, Trudel, & Rynne, 2009). Examples of formal learning include large-scale coach education programs, such as the National Coach Certification Program (NCCP) in Canada. However, formal coaching programs have often been criticized for focusing on technical and tactical knowledge, leading to 'robotic' coaching (Werthner & Trudel, 2006). Coaches often credit informal learning situations to their knowledge acquisition, learning pathways include mentoring, learning from experience, reading books, attending coaching clinics, and reflection (Cushion & Nelson, 2013; Fairhurst et al., 2017; Vallée & Bloom, 2016; Wilson, Bloom, & Harvey, 2010). Informal learning pathways are especially important in developing interpersonal and intrapersonal knowledge, given that formal coach education mostly focuses on professional knowledge acquisition (Gilbert & Côté, 2013). Informal learning situations are crucial in certain contexts, such as parasport, where formal education programs are not tailored to the needs of Paralympic coaches (Cregan, Bloom, & Reid, 2007). Fairhurst and colleagues (2017) interviewed six of the most experienced Paralympic head coaches in Canada to explore their perceptions of learning and educational experiences, including formal and informal mentoring opportunities. Coaches who had a mentor learned highly specialized skills specific to Paralympic sport, and described their mentorship as a significant learning experience (Fairhurst et al., 2017). Although these parasport coaches actively sought out mentors to compensate for the lack of formal coach education in Paralympic sport coaching, elite coaches of able-bodied athletes should also actively seek mentors in order to improve their coaching practice.

Recently, mentoring has become a bridge between formal and informal coaching education, as some formal mentoring programs emerge (Cushion & Nelson, 2013; Koh, Bloom, Fairhurst, Paiement, & Kee, 2014). For example, Koh and colleagues (2014) investigated a formalized mentoring program for novice basketball coaches in Singapore and examined which factors contributed to its effectiveness. The formalized mentoring program included 12 mentors and 36 mentees (three mentees were assigned to each mentor), and the results indicated that both the mentees and mentors benefited from the program. This program illustrated many benefits of mentoring concerning interpersonal and intrapersonal knowledge. In fact, the mentors engaging in self-reflection demonstrated evidence for a link between mentoring and reflection. Engaging in self-reflection is a key feature of effective coaching practice (Côté & Gilbert, 2009; Gilbert & Côté, 2013). Therefore, mentoring can lead to improved intrapersonal knowledge by promoting reflection.

Reflection is another form of informal learning in coaching, and arguably one of the most important processes towards gaining intrapersonal knowledge (Côté & Gilbert, 2009; Gilbert & Côté, 2013; Gilbert & Trudel, 2005). Many coaches engage in superficial and simplistic reflections, however coaching effectiveness can only occur with deeper critical reflection (Cushion & Nelson, 2013; Knowles, Gilbourne, Cropley, & Dugdill, 2014; Knowles, Gilbourne, Borrie, & Neville, 2001). Becoming a critically reflective coach takes time, commitment, and practice. Therefore, reflection can be seen as a skill one can improve in order to become a better coach. Reflection helps increase self-awareness, which is an important component of emotional intelligence (Salovey & Mayer, 1990). Research on successful coaches has linked emotional intelligence and similar characteristics such as open-mindedness to coaching expertise (Carter & Bloom, 2009; Lara-Bercial & Mallett, 2016). Although both intrapersonal knowledge and

emotional intelligence concern heightened self-awareness, and are related to coaching expertise, coaching science research has yet to link them together. The development of emotional intelligence has been theorized by Salovey and Mayer's (1990) *ability model,* where emotional intelligence is considered to be a set of abilities one can practice and improve. In turn, sports science researchers have also studied how coaches develop and practice emotional intelligence (Hwang, Feltz, & Lee, 2013; Thelwell, Lane, Weston, & Greenlees, 2011). Although research on emotional intelligence is increasing, coaching science research has yet to study how coaches develop and acquire intrapersonal knowledge.

Purpose of the Study

The aim of the study was to gain insight into the development, application, and perceived benefits of intrapersonal knowledge in successful female university coaches. The following research questions guided the present study:

1. How did coaches learn and develop their intrapersonal knowledge?
2. What intrapersonal techniques do coaches use and value?
3. How often and when do coaches use intrapersonal skills?
4. What are the perceived benefits of engaging in intrapersonal knowledge reflections?

Significance of the Study

Although intrapersonal knowledge is a crucial element of coaching expertise and effectiveness (Côté & Gilbert, 2009), evaluations of coaching effectiveness have primarily focused on professional and interpersonal knowledge. In the few instances where research focused on intrapersonal knowledge, reflection was the term used to describe a person's use of self-awareness and introspection (Gilbert & Côté, 2013). The information gathered from this study expanded knowledge on how coaches developed, applied, and benefited from intrapersonal

knowledge. Coaches developed and applied their intrapersonal knowledge mainly through daily reflections and engaging in lifelong learning. Both of these techniques allowed the coaches to learn from their experiences, to self-evaluate their strengths and weaknesses, which ultimately led to growth and improvements in coaching effectiveness. Additionally, the findings provided evidence of the interconnectedness of the varying types of coaching knowledge, for example the coaches reflected (intrapersonal) on how they ought to treat every athlete differently depending on their needs (interpersonal). Furthermore, coaching is an emotional career that is filled with a number of organizational and performance stressors (Didymus, 2017; Olusoga, Maynard, Hays, & Butt, 2012; Potrac, Jones, Purdy, Nelson, & Marshall, 2014; Thelwell, Weston, Greenlees, & Hutchings, 2008a). Stressors can lead to serious repercussions such as physical, emotional, and mental exhaustion, are especially common in female coaches (Kelley, 1994). The latter symptoms of burnout were mentioned by three of the six sampled participants, with one expressing feeling on the cusp of a bout of depression. These alarming findings reveal the severity that coaching demands and stressors can reach, especially when coaches do not have the proper resources to cope (Wagstaff et al., 2018; Levy, Nicholls, Marchant, & Polman, 2009). The implications of coach stress can impact the entire team, as coaches mentioned their emotions were closely linked to their athletes' emotions. This link between coach stress and athlete stress illustrates the importance of studying intrapersonal coaching knowledge in order to become aware of these stressors in a coaching performance setting. This study demonstrated the value of incorporating day to day intrapersonal knowledge concepts in coaching to improve effectiveness but also to prevent and anticipate stressful experiences, and ultimately improve well-being.

Delimitations

The following delimitations were identified for the present study:

1. All participants were full-time female head coaches of a university basketball, volleyball, or soccer team in Canada.
2. All participants had at least 6 years of head coaching experience at the university level.

Limitations

The following limitations were identified for the present study:

1. Results may only apply to soccer, volleyball, and basketball coaches.
2. Results may only apply to female coaches.
3. Results may only apply to full-time head coaches, not assistant or part-time coaches.
4. Results may only apply to Canadian University coaches.
5. Results may be influenced by the coaches' own perceptions and their experiences.

Operational Definitions

Intrapersonal knowledge: The understanding of oneself and the ability for introspection and reflection (Côté & Gilbert, 2009).

Reflection: The act of using self-awareness to improve coaching effectiveness (Gilbert & Côté, 2013).

Reflective Practice: A purposeful and complex process that facilitates the examination of experience by questioning the whole self and our agency within the context of practice (Knowles, Gilbourne, Cropley, & Dugdill, 2014).

U Sports: Representing the highest level of university team sport competition in Canada. https://www.usports.ca/en

Chapter 2

Literature Review

The following literature review will include three main sections. First, a review of the definition of coaching effectiveness and expertise will be provided. This will include a focus on the intrapersonal knowledge component of the definition. Second, an overview of emotional intelligence and how it relates to intrapersonal knowledge and coaching will appear. Finally, a section on stress and coaching will be presented, including literature on psychological skills and self-regulation, and the implications of these on intrapersonal knowledge.

Coaching Effectiveness and Expertise

Côté and Gilbert's (2009) definition of coaching effectiveness and expertise includes three components: (a) athlete's outcome, (b) coaching contexts, and (c) coaches' knowledge. Although this particular study will focus on coaches' knowledge, coaching effectiveness and expertise should integrate all three components, and consider how coaching knowledge interacts with athlete's outcomes in specific contexts (Côté & Gilbert, 2009). More specifically, coaching knowledge involves professional, interpersonal, and intrapersonal knowledge. Expert coaches are often judged on their sport-specific knowledge (professional), but expertise also involves creating and maintaining relationships with others (interpersonal), and the ability to learn and reflect on one's own practice (intrapersonal) (Côté & Gilbert, 2009; Gilbert & Côté, 2013). Therefore, as with the definition, when studying coaching knowledge, one must consider how each type of knowledge interacts with one another. Additionally, the three forms of coaching knowledge are interrelated, and can even overlap at some level (Côté & Gilbert, 2009). Research on each individual type can help inform how to differentiate them, and understand how they

ultimately interact. The following will describe intrapersonal knowledge in depth as it is the focus of this study.

Intrapersonal knowledge. Research involving sports coaching effectiveness has almost exclusively focused on professional and interpersonal knowledge (Côté & Gilbert, 2009; Jowett, 2007; Knowles, Gilbourne, Borrie, & Nevill, 2006). Although intrapersonal knowledge is rarely the focus of coaching research, some research has focused on constructs that parallel intrapersonal knowledge. For example, Wiman, Salmoni, and Hall (2010) interviewed eight Canadian University level or higher coaches along with seven Canadian varsity level or higher athletes, in order to examine the definition and development of expert coaching. One important result was the emergence of open-mindedness as a necessary characteristic to facilitate coaching (Wiman et al., 2010). According to both the coach and athlete participants, the definition of open-mindedness focused around a "willingness to learn, willingness to accept criticism, willingness to listen to others, willingness to advance with the changing times, willingness to recruit resources to assist him/her in areas where he/she is weak and being a good listener" (Wiman et al., 2010, p. 49). Open-mindedness fits well within intrapersonal knowledge because an open-minded coach will seek feedback from outside sources and be willing to look within (introspect) and self-analyze. Open-minded coaches also seek more opportunities to learn and grow in their profession (Wiman et al., 2010).

Learning and knowledge seeking is a common characteristic of expert coaches (Bloom & Salmela, 2000; Vallée & Bloom, 2005). For instance, DeMarco and Mccullick (1997) investigated how legendary coaches Vince Lombardi, John Wooden, and Pat Summitt, developed coaching expertise. One distinguishing characteristic was their constant thirst for new knowledge and the drive to become better (DeMarco & Mccullick, 1997). This reiterates the

importance of gaining new knowledge and being introspective enough to apply this new knowledge into games and practices. Knowledge seeking is a recurring topic in other coaching expertise research. For example, Bloom and Salmela (2000) interviewed sixteen expert Canadian coaches and focused on the importance of the coach's personal characteristics. The findings revealed how the coaches' personalities were shaped by their desire to learn and continuously grow. Additionally, many of the coaches looked to improve by evaluating their own progress, and consequently implementing career changes (Bloom & Salmela, 2000). More recently, Donoso-Morales, Bloom, and Caron (2017) interviewed six successful Canadian university team-sport coaches on the development and implementation of a culture of excellence within their programs. Results showed coaches gained knowledge through self-reflection, reading books, attending conferences and interacting with other coaches, and having a mentor (Donoso-Morales et al., 2017). These findings relate to intrapersonal coaching knowledge, suggesting it is a critical aspect in coaching effectiveness and expertise. In a similar manner, Vallée and Bloom (2005) interviewed five expert university coaches who built successful programs. Coaches showed a commitment to learning by continually developing themselves through learning from their own mistakes, learning from early coaching experiences, and valuing self-evaluation (Vallée & Bloom, 2005). Similar results were found in a case study of coach Chantal Vallée, who won five consecutive basketball national championships coaching the University of Windsor (Vallée & Bloom, 2016). By seeking lifelong learning and personal reflection, Coach Vallée implemented personal changes as a result of reading successful leader's books, watching coaching clinics, engaging in personal reflection, and finding mentors (Vallée & Bloom, 2016). Thus, Coach Vallée incorporated intrapersonal knowledge through valuing ongoing education and self-reflection as a means to improve her coaching skills. Although there are many examples

of intrapersonal behaviours, most often the use of intrapersonal knowledge to improve coaching effectiveness is described by reflection (Gilbert & Côté, 2013). Even though reflection is merely a component of the definition of intrapersonal knowledge, previous coaching research has valued studying reflection on its own.

Reflection. Reflection is a crucial practice for coaches to improve and become more self-aware (Gilbert & Côté, 2013). An effective coach will use reflection in order to transform experiences into knowledge (Gilbert & Trudel, 2005). Gilbert and Trudel (2001) conducted one of the first experienced-based learning studies in a sport coaching context when they interviewed six youth team sport coaches to investigate how they learned. All of the coaches developed and refined their coaching strategies through a process of engaging in three different types of reflection: (1) reflection-in-action, (2) reflection-on-action, (3) retrospective reflection-on-action (Gilbert & Trudel, 2001). These three types of reflection were triggered by a coaching issue or problem. The first type, *reflection-in-action* represents reflection that occurs in the midst of the act of coaching. For example, during a basketball game, a coach will use a reflective conversation in his/her mind to adjust to the other team's defense, and consequently call the proper play. R*eflection-on-action* occurs after an event, while there is still potential to resolve the coaching issue. For example, rather than making adjustments during the game, the coach might choose to wait until post-game to reflect on new plays and other factors that affected the game. Finally, *retrospective reflection-on-action*, represents a "thinking back" reflection. For example, if the coach has had an issue with the offensive system throughout the season, he/she might use the off-season time to reflect back and make proper adjustments before the next season. These three types of reflection relate back to experiential learning: the first two types represent learning *through* experience, in the present moment, and the third type represents learning *from*

experience, looking back, in the past (Gilbert & Trudel, 2001). Although these three types of reflection have been established in the coaching literature, other studies of coach reflection do not always clearly identify the type of reflection that is being investigated (Gilbert & Côté, 2013).

In some cases, even though the specific type of reflection is not mentioned, they emphasize the significance of timing in reflection. For example, Taylor, Werthner, Culver, and Callary (2015) explored how four parasport coaches used reflection to help them learn and develop as coaches. Following a series of three interviews with each coach, all four coaches reported 'thinking over' and 'reflecting on' their day to day coaching thoughts, actions, and current knowledge. The results illustrated the importance of the depth and timing of reflections. In fact, the findings suggested that the timing of reflections, by adopting a 'before, during and after approach' to reflecting on experiences, allowed the parasport coaches to learn how to adapt and more effectively coach their athletes (Taylor et al., 2015). The latter findings parallel Gilbert and Trudel's (2015) types of reflections mentioned above, and the notion of timing in reflection. Although timing and specific coaching issues are important factors in a coach's reflection, reflections are not always bound by time and problem solving. Reflection can also be used to implement innovations and other enhancing changes to one's practice (Gallimore, Gilbert, & Nater, 2013). There are some more general types of reflection to improve within coaching expertise, such as self-reflection and group reflections through mentoring.

Self-reflection allows coaches to use their experiences and identify the areas of improvement and consider solutions for change (Strand & Christofferson, 2017). Self-reflection can occur through different methods such as self-evaluation, or self-analysis, and visualization (Wiman et al., 2010; Knowles, Gilbourne, & Neville, 2001). Self-analysis and visualization (or

imagery) are forms of internal feedback, where a coach will identify their own strengths and weaknesses by looking within, by being introspective (Wiman et al., 2010). Knowles and colleagues (2001) examined eight coaching science students from the Liverpool John Moores University Centre for Sport and Exercise Sciences, in order to develop and assess reflective skills through a structured development program. The program lasted from September to June, over two semesters, and included workshops to facilitate reflective practice. Some of the methods proposed were reflective journal writing and imagery. Although journal writing can facilitate reflective practice, most of the coaches in the study reported it being too time consuming and needing more structure (Knowles et al., 2001). Furthermore, a less time-consuming process used by the coaches during the program, to facilitate and improve reflective skills, was imagery. Imagery has been documented as a trainable psychological skill for athletes and sport performance, therefore coaches could use imagery as a mental training skill to aid reflection (Knowles et al., 2001). Self-reflection can help improve a coach's practice, yet collective reflections in the form of mentoring and peer-teaching can additionally contribute to improvements in coaching.

Collective reflections and shared experiences with others can further one's reflection skills, and in turn intrapersonal knowledge. Expert coaches often seek external feedback from their athletes, assistant coaches, or mentors in order to further improve their craft (Strand & Christofferson, 2017; Wiman et al., 2010). Mentoring has been identified as an important tool in becoming an expert coach (Bloom, 2013; Bloom, Durand-Bush, Schinke, & Salmela, 1998; Wiman et al., 2010). Having a mentor, and seeking feedback from others relates to a coaches' openness to learn and a thirst for constant improvement (Bloom & Salmela, 2000). In fact, highly successful university coaches viewed mentoring as a critical form of lifelong learning and

development (Donoso-Morales et al., 2017). Mentoring is an effective way to gain experience and coaching knowledge through more experienced coaches. For instance, Irwin, Hanton, and Kerwin (2004) interviewed 16 elite level men's artistic gymnastic coaches on their reflective practice and the origins of elite coaching knowledge. These coaches identified mentor coaches as the most important resource in developing the skill of coaching. Particularly, they explained how mentors allowed them to evolve from an initial level of understanding to a higher level of competence (Irwin et al., 2004). The latter illustrates how mentors can facilitate coaching development.

Furthermore, the knowledge and experience coaches acquire from mentors goes beyond technical, tactical, and physical knowledge, and includes information that can help shape their coaching style and philosophy (Bloom, 2013). For instance, Gallimore, Gilbert, and Nater (2013) followed a high school basketball coach's 10-year journey (2003-2013) using reflective practice, with the mentoring and guidance of legendary coach John Wooden. Indeed, Wooden claimed coaching reflection was a key to his success (Gallimore et al., 2013). Although the coach learned a number of things from coach Wooden, the focus remained on the values of reflective practice throughout a career. Some of the changes implemented by the mentee included seeking feedback from players and other coaches, and reviewing every practice mentally afterwards to see how it could have been improved (Gallimore et al., 2013). The high school coach also became increasingly self-aware of all the directions he gave his players, making sure the content and the length were effectively transferring his message. Over the years this coach successfully improved his coaching practice by implementing Wooden's teaching philosophy, and in turn, his teams' performances also improved. This longitudinal case illustrates how a coach's reflective practice can lead to success in athlete performance. In addition to mentoring, collective

reflections can take place with other coaches and colleagues (Irwin et al., 2004; Cassidy, Potrac, & McKenzie, 2006; Taylor et al., 2013). Cassidy et al. (2006) integrated reflection into a rugby coach education program and allowed for the coaches' perceptions and evaluation of the program. The value of talking with other coaches emerged as a major theme, where all the coaches agreed that having the opportunity to discuss with other coaches was beneficial. They explained how these conversations were based on everyday realities of coaching, and therefore focused on practical solutions to the problems and issues these coaches dealt with daily (Cassidy et al., 2006).

The majority of research relating to intrapersonal knowledge concerns reflection. Yet, research has shown important intrapersonal personality traits can also contribute to coaching expertise, such as open-mindedness (Wiman et al., 2010; Strand & Christofferson, 2017). Additionally, elevated self-awareness is a significant characteristic of successful coaches (Lara-Bercial & Mallett, 2016). In turn, this enhanced self-awareness reflects a coach's emotional intelligence (Gilbert & Côté, 2013; Lara-Bercial & Mallett, 2016). Emotional intelligence in coaching literature often relates to interpersonal knowledge (Gilbert & Côté, 2013), yet, there are some concepts of emotional intelligence that align with intrapersonal knowledge.

Emotional Intelligence

Coaching is an emotional job, where both coaches and athletes experience a variety of high emotions while striving to be the best and overcome challenges in their sport (Potrac, Jones, Purdy, Nelson, & Marshall, 2014). The term *emotional intelligence* was defined by Salovey and Mayer (1990) as "the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (p. 189). The majority of emotional intelligence research has been conceptualized around the *mixed*

model (Goleman, 1995) and the *ability model* (Salovey & Mayer, 1990). The mixed model includes a combination of both trait and state characteristics (Goleman, 1995). The ability model (Salovey & Mayer, 1990) has received more attention from sport psychology and coaching researchers, and conceptualizes emotional intelligence as a set of abilities that can be learned and developed over time (Mayer & Salovey, 1997). Mayer and Salovey's (1997) ability model includes four underlying concepts or abilities: (1) perceiving emotions, (2) using emotions to facilitate thought, (3) understanding emotions, and (4) managing emotions. These four branches represent the abilities an expert coach will work towards in order to improve his/her emotional intelligence. Expert coaches must not only be able to appraise their athletes' emotions, but also their own. In fact, appraisal of one's own feelings and those of others are highly related (Salovey & Mayer, 1990). A coach who is unable to appraise and regulate their own emotions compromises the development of their athlete (Thelwell, Lane, Weston, & Greenless, 2011). There is a lack of sport-specific research involving emotional intelligence, while other domains such as the organizational sciences, have been studying emotional intelligence and leadership for some time (Chan & Mallett, 2011; George, 2000; Thelwell et al., 2011). The following section will detail some of the rare studies in sport on emotional intelligence, first concerning athletes, followed by emotional intelligence research concerning coaches.

Emotional intelligence and psychological skills are significantly related to sport performance (Chan & Mallett, 2011; Zizzi, Deaner, & Hirschhorn, 2003). Moreover, Zizzi and colleagues (2003) examined 61 NCAA Division I baseball players' pitching and hitting performances in relation to their emotional intelligence scores. Results from the correlations suggested emotional intelligence was moderately related to pitching performance, but not to hitting performance. The authors believed the results were due to contextual differences between

pitching and hitting. Indeed, pitchers have the ability to dictate the pace of play, whereas batters must react. Furthermore, batting involves numerous other factors such as vision, hand-eye coordination, timing, technique, and power, all in a split second reaction time. Pitchers on the other hand have much more time and opportunities to make use of emotional intelligence. For example, they have the time to process their emotional state, engage in self-talk, as well as recognize external events. Pitchers are responsible for communicating with their teammates and being aware of runners on base. Thus, pitching involves emotional intelligence skills because they must recognize their own, as well as other's emotional states, and consequently communicate. Similarly, Lane, Thelwell, Lowther, and Devonport (2009) studied the relationship between emotional intelligence and psychological skills among 54 male collegiate athletes. Results showed that participants who used self-talk were more likely to appraise and regulate their own emotions. These results relate to concepts of intrapersonal knowledge by illustrating how self-talk increases self-awareness, and allows for better emotion appraisal and emotion regulation. Indeed, the authors concluded that enhancing emotional intelligence develops an individual's awareness of the need for, and the benefits, of self-regulation strategies (Lane et al., 2009). These studies on athletes illustrate the connection between emotional intelligence and trainable psychological skills, which is in line with Mayer and Salovey's (1997) ability model. Recently, understanding coaches' emotional intelligence has gained popularity as well due to the growing view of coaching as a performance.

Research on emotional intelligence in sport mostly involves athletic performance, however coaching performance is just as important, and can influence an athlete's performance (Lara-Bercial & Mallett, 2016; Meyer & Fletcher, 2007; Thelwell et al., 2011). For example, Lara-Bercial and Mallett (2016) interviewed 17 elite coaches and 19 athletes and found the

athletes' felt their coaches were successful as a result of emotional intelligence, supported by enhanced self-awareness. These skills allowed the coaches to manage their high-performance entourage, and the coaches reported that high emotional intelligence was crucial to adapt their behaviour to each relationship with their individual athletes. Indeed, the serial winning coaches emphasized that high emotional intelligence was necessary to modify their behaviour, and cater to each individual, rather than use a one size fits all approach to their relationship building and conflict management. Although this study illustrates the importance of emotional intelligence and coaching, it was not the focus of the study. Therefore, there is a need for an increased understanding of the role of emotional intelligence in coaching effectiveness.

Many of the studies that have involved emotional intelligence and coaching as a central focus, also examined coaching efficacy (Hwang, Feltz, & Lee, 2013; Thelwell et al., 2011). For example, Hwang and colleagues (2013) explored the relationships between emotional intelligence, coaching efficacy, and leadership style of 323 head high school basketball coaches. Their results demonstrated that the coaches' awareness and ability to regulate their own and athletes' emotions contributed to their confidence to affect the learning and performance of their athletes during practices and competitions (Hwang et al., 2013). A coach who is more competent in emotional functioning will be better able and more confident to focus on game strategies, teaching, motivating, and instilling character, all of which contribute and influence athletic performance. In relation to leadership style, coaches who had a higher sense of regulating their own emotions and kept a positive mood, were more likely to exhibit positive feedback behaviours (Hwang et al., 2013). Comparatively to the latter study, Thelwell et al. (2011) examined the relationship between emotional intelligence and coaching efficacy of 99 coaches. Coaches filled out the Emotional Intelligence Scale (Schutte et al., 1998) and the Coaching

Efficacy Scale (CES; Feltz, Chase, Moritz, & Sullivan, 1999). Findings following a correlational analysis suggested that both coach appraisal and regulation of their own emotions were significantly correlated with overall coaching efficacy. The coaches became more aware of how emotional intelligence facilitated their confidence and ultimately their coaching performance. This reiterates the importance of a coach's self-awareness towards emotions, since a coach who is unable to appraise and regulate their own emotions can hinder their athletes' performance. These results suggest that coaches who create stress for their athletes may actually have low levels of coach efficacy and are unable to appraise their own emotions, or those of others (Thelwell et al., 2011). Research on emotional intelligence and stress imply a link between emotional intelligence and stress awareness, as well as emotional intelligence and stress management (Chan & Mallett, 2011; Meyer & Fletcher, 2007). Coaching includes a wide range of demands, and involves performance and organizational stressors (Levy, Nicholls, Marchant, & Polman, 2009; Washington & Reade, 2013). Therefore, controlling these stressors, and emotions attached to them, becomes increasingly important for coaches and for athletes' performances (Frey, 2007). Increasing intrapersonal knowledge, by means of increasing self-awareness and emotional intelligence abilities, could help coaches regulate stressors and emotions in these pressure situations.

Stress and Coaching

Coaching involves much more than teaching tactical and technical knowledge of a sport. The modern coach is also expected to have knowledge concerning aerobic training, strength training, nutrition, sport psychology, scheduling, to name a few examples (Washington & Reade, 2013). These expectations make coaching today increasingly complex, and as a result increasingly stressful, which can impact job satisfaction for coaches (Davies, Bloom, & Salmela,

2005). Coaches must deal with their own performance and psychological well-being, while managing their athletes' well-being, and at the same time attempting to balance a healthy personal life (Durand-Bush, Collins, & McNeill, 2012; Thelwell, Weston, Greenlees, & Hutchings, 2008a). Consequently, the performance and organizational stressors coaches regularly experience, as well as some of the coping strategies and psychological-skills they apply will be covered in this section.

Stress research in sports has mostly focused on the athletes' experiences (e.g., Hanton, Fletcher, & Coughlan, 2005). Yet, as coaching increasingly becomes professionalized, more stressors have emerged, thus encouraging research on this topic (e.g., Didymus, 2017; Olusoga, Maynard, Hays, & Butt, 2012; Thelwell et al., 2008a). For instance, Thelwell et al. (2008a) examined performance and organizational stressors experienced by eleven elite level coaches in the UK. The responses from the interviews revealed a total of 182 potential stressors, with 88 being performance and 94 being organizational stressors. The performance stressors were either associated with the coaches own performances or their athletes' performances. Some examples of performance stressors included preparing for competitions, dealing with athletes' emotions, and decision making during competition. In addition, coaches reported numerous organizational stressors such as budget and finances, scheduling, administrative paperwork, and managing other coaches and athletes (Thelwell et al., 2008a). This study provided important insight into the variety and quantity of stressors for coaches. Consequently, coaches must be given the tools and psychological-skills to deal with these pressures. Recently, a number of studies have explored how elite level coaches cope and used psychological skills to manage their stress (Didymus, 2017; Olusoga, Maynard, Butt, & Hays, 2014; Thelwell, Weston, Greenlees, & Hutchings, 2008b).

Stress management in coaching is crucial for optimal coaching, athletic, and team performance. Research on coaching stress demonstrates the importance of developing psychological skills for effective coaching under pressure (Olusoga, Maynard, Butt, & Hays, 2014; Thelwell et al., 2008b). Thelwell and colleagues (2008b) interviewed 13 professional coaches of elite-level athletes in order to understand the location (training or competition), time frame (before, during, or after), and purpose, for using four predetermined psychological skills: self-talk, imagery, relaxation, and goal setting. The findings revealed coaches most often used self-talk and imagery, consistently across time frames and locations. For example, coaches used self-talk to overcome performance concerns in regard to controlling their emotions, to improve planning sessions (pre-, in-, and post competition talks), for enabling rational thinking, and getting into the appropriate frame of mind. Similarly, the coaches used imagery to control emotions, to develop confidence in what they delivered to their teams, and to verbalize coaching points (Thelwell et al., 2008b). Self-talk and imagery are both related to intrapersonal knowledge, in that they are both introspective in nature. They are also in line with emotional intelligence since coaches were able to use these techniques to control their own emotions. Thus, learning psychological skills can develop a coach's emotional intelligence, and further a coaches' intrapersonal knowledge.

Looking into how coaches can develop these psychological skills represents a significant aspect of improving coaching effectiveness. Olusoga et al. (2014) developed a mental skills training program based on their previous research with Olympic level coaches. The mental skills training program involved six workshops, and included topics such as confidence building, emotional control strategies, communication, preparation for major events, and coach specific strategies. In order to assess the intervention's success, coaches were given three questionnaires

beforehand: (1) the Mental Skills Questionnaire (MST), designed to assess the mental skills respondents currently use, (2) the Competitive State Anxiety Inventory-2/modified (CSAI-2md), a self-report measure of state anxiety in a competitive environment (based on their last competitive event), and (3) the modified version of the COPE inventory (MCOPE), developed to more accurately assess situational coping in physical activity settings. At the end of the intervention, coaches filled out the Social Validation Questionnaire (SVQ), designed to gain information regarding the participants' feelings towards the completed workshops. Finally, to obtain post-intervention data, the coaches were asked to fill out the same three questionnaires (MST, CSAI-2md, and MCOPE) after their first competitive event following the intervention. The findings suggested these coaches benefited from the workshops by positively changing their perceptions of their ability to effectively coach under pressure (Olusoga et al., 2014). The MSQ indicated coaches' relaxation improved, and the CSAI-2md indicated the coaches' perceived intensity of anxiety symptoms was significantly lower following the intervention. Furthermore, analyses from the MCOPE questionnaires indicated coaches used several coping strategies, learned during the workshops, to manage the stressors of competition. Finally, the SVQ revealed how the overall intervention had practical significance for the coaches. Indeed, the coaches highlighted how the intervention allowed them time to reflect, they were able to share experiences with other coaches, they could build self-confidence, and developed the ability to physically relax when encountering a stressor (Olusoga et al., 2014). The latter results represent many overlapping concepts to intrapersonal knowledge, such as reflection and sharing knowledge with other coaches. This illustrates the implications psychological-skills interventions can have on developing intrapersonal knowledge.

In addition to psychological skills, self-regulation and self-monitoring literature in coaching also connect to intrapersonal knowledge concepts and coaching effectiveness (Durand-Bush, Collins, & McNeill, 2012). For example, Durand-Bush and colleagues (2012) explored eight female coaches' experiences of stress and examined whether the self-regulation strategies helped them manage daily demands and cope with stress. As a secondary aim, they also explored the coaches' perceptions of the impact of stress and self-regulation on their well-being, burnout, and coaching effectiveness. Results described the coaches' internal and external demands, the available external or internal resources, and the coping responses used. Specifically, a number of external resources were in line with intrapersonal knowledge. For instance, all of the eight coaches cited that engaging in continued learning by taking courses or workshop, and reading through literature helped them deal with growing demands of the job (Durand-Bush et al., 2012). Additionally, half of the coaches mentioned relying on a formal or informal mentor who provided them with useful feedback and encouraged their self-reflection (Durand-Bush et al., 2012). Self-reflection was mentioned by seven of the coaches as an important internal resource to determine what they did well and what they could have done differently in various coaching situations. Indeed, most often self-reflection was used to enhance coach effectiveness and well-being, and could take varying forms such as reflective journal writing, which served as a self-monitoring tool as well (Durand-Bush et al., 2012). These results illustrate a possible connection between intrapersonal knowledge and self-regulation by utilizing overlapping strategies such as self-reflection. Furthermore, all of the coaches reported that stress could negatively impact their coaching effectiveness, in areas such as engaging in more autocratic decision making, losing patience, and withdrawal from coach-athlete interactions (Durand-Bush et al., 2012). The latter demonstrates how coaching stress can impact both coach and athlete well-being. Therefore,

allowing coaches to develop self-regulation strategies can help them manage their stress, can allow for effective coaching and healthy coach-athlete relationships, and can concurrently contribute to their intrapersonal knowledge.

Developing intrapersonal knowledge, by means of psychological-skills, can benefit a coaches' perception of stress, as well as improve the overall team's and athlete's well-being. In fact, coaches are a significant source of stress for athletes (Frey, 2007; Thelwell et al., 2017). For instance, Frey (2007) interviewed 10 NCAA Division I head coaches on their experiences with stress, the perceived effects of stress on their coaching performance, and their coping strategies. The findings, relating to responses and effects of stress, revealed the effect of their stress on others. Four of the coaches felt their stress impacted their athletes by lowering their performance or causing their athletes to experience stress themselves. This illustrates the importance of coaches engaging in effective stress management in order to maintain personal well-being, but also help their athletes feel more confident and under control in high-pressure situations. More recently, Thelwell et al. (2017) explored the athlete's perceptions of coach stress in elite sport environments. Semi-structured interviews were conducted with 13 elite athletes. Results detailed the signals athletes used to detect when their coaches experienced stress, the effects of coach stress on athletes, and how effective they perceived their coaches to be when experiencing stressors. The findings relating to signals of stress suggested the coaches were unaware of their behaviours, such as body language, or that they were unable to manage their behaviours and emotions (Thelwell et al., 2017). Managing emotions and one's behaviour in stressful situations aligns with emotional intelligence abilities and self-awareness. Additionally, when considering the effects of coach stress on athlete stress, the results suggested coach stress not only influenced individual behaviour, but overall team functioning. The coaches' inability to manage their stress

resulted in the athletes' experiencing stress, leading to less effective team performance (Thelwell et al., 2017). These results align well with concepts of emotional intelligence, an individual's inability to manage their emotions results in an inability to manage others' emotions (Mayer & Salovey, 1997). This study exhibited how a coach who was unable to manage their own stress, would not be able to manage their athletes' stress. The negative effect of stress on the coach-athlete relationship illustrates the importance of providing coaches with tools to effectively manage their stress. Some psychological skills have been successfully used by elite coaches tlower stress, such as imagery and self-talk. These skills translate well into intrapersonal knowledge, as they are introspective in nature, can help coaches increase self-awareness concerning stress and influence their behaviours.

Chapter 3

Methods

The current study followed a qualitative methodology to explore how successful female Canadian University coaches developed, implemented, and benefitted from intrapersonal knowledge. Qualitative researchers utilize participants' natural settings to better understand their perspectives and worldviews (Creswell, 2013; Sparkes & Smith, 2014). In turn, the researchers used reflexivity through their own philosophical assumptions in order to interpret the participants' views. The following section describes the researcher's philosophical assumptions, with corresponding ontological and epistemological approaches. The methodology and methods for data collection and data analysis are also covered. Finally, questions of validity, quality standards, and trustworthiness of the study are examined.

Philosophical Assumptions

A social constructivist paradigm means that individuals develop subjective meanings of their experiences that are formed through interactions with others, and through historical and cultural norms (Creswell, 2013). Moreover, the researcher's role involves interpreting the participants' meanings of the world. The ontological beliefs in social constructivism suggest that multiple realities are created and constructed through our lived experiences and interactions with others (Guba & Lincoln, 1994; Creswell, 2013). The epistemological beliefs for social constructivism are based in subjectivism, which implies that reality is co-constructed between individuals, in this case between the researcher and participants (Creswell, 2013). Indeed, the researcher and the participants are assumed to be interactively linked, thus the findings are created as the investigation takes place (Guba & Lincoln, 1994). A relativist ontology and a

subjectivist epistemology guided the research and underlined the methods of data collection and analysis utilized.

Methodology

There are various types of methodologies in qualitative research such as narratives, phenomenology, ethnography, and case study. Case study research involves the study of a phenomenon within a real-life, contemporary context or setting (Creswell, 2013). There are three types of case studies: intrinsic, instrumental, and collective. Intrinsic case studies involve a case that has unusual interest in and of itself, thus needs to be described and detailed to understand its uniqueness (Creswell, 2013; Sparkes & Smith, 2014). Instrumental case studies provide insight into a phenomenon or issue, thus the individual is not the focus, rather the external phenomenon is of interest (Sparkes & Smith, 2014). Collective case studies represent an extension of an instrumental case study, where multiple cases are studied to investigate a common phenomenon or population, as is the case in the present study (Sparkes & Smith, 2014). A collective case study methodology was most useful in order to investigate how successful female university team sport coaches developed, implemented, and benefitted from engaging in intrapersonal knowledge. This methodology relied heavily on interpretation and understanding of the researcher, which related back to the relativist ontological and subjectivist epistemological assumptions previously mentioned (Creswell, 2013; Sparkes & Smith, 2014). In fact, the researcher's experience as a female university team sport player, as a leader and captain, as well as assistant coaching experiences, assisted in interpreting the participant's experiences as university female coaches, and helped to understand the data collected. Good qualitative case studies are characterized by this in-depth understanding of the key cases. The cases were

purposefully selected in order to illustrate diverse perspectives of the phenomenon in question (Creswell, 2013).

Participants and Procedures

Six current or recently retired Canadian university team sport coaches were purposely selected from the sports of basketball and volleyball. Only women head coaches were chosen in order to obtain a female perspective of intrapersonal knowledge. Selection criteria was used to identify attributes of interest in the cases, where the participants were selected because they had specific characteristics linked to the research question (Hastie & Hay, 2012). For instance, research on successful university coaches has emphasized the importance of experience in the development of intrapersonal skills (Donoso-Morales, Bloom, & Caron, 2017). Therefore, the first criterion was at least five years of experience as a head coach at the university level. Second, the coaches were full-time head coaches. Selection criteria concerning winning percentage was deemed unimportant, since coaching expertise is not solely evaluated by winning statistics, especially concerning intrapersonal knowledge. Yet, the six coaches' success within their sporting community was partly evidenced by having won a combined 11 National Championships. Third, the participant coaches were well respected in their local coaching community. In fact, the participants received a combined twenty-two coach of the year awards, either within their conference, all of U Sport, or both. Furthermore, five of the six participants had obtained a level 3 in the National Coaching Certification Program (NCCP), while the remaining participant had achieved a level 4. All of the coaches were highly educated outside of coaching as well. One coach had a bachelor's degree, four of the six coaches had a master's degree, and one had a PhD. The coaches were well-known for valuing the development of good people in their athletes. These characteristics illustrate qualities of open-mindedness and

emotional intelligence, which helped to ensure recruitment of reflexive coaches. Selection methods to ensure the coaches possessed these characteristics included referrals from other coaches or other professionals in the field. After obtaining approval by the McGill Research Ethics Board, the researcher emailed potential participants through a recruitment script (see Appendix A). Once coaches agreed to participate in the study, a consent form was sent to them (Appendix B). The location of the interviews was chosen by the participants, four of the participants chose their University offices to meet, and two preferred to meet at a cafe. The length of the interviews varied between 64 and 156 minutes. Sessions were audio recorded and transcribed verbatim.

Data Collection

Interviews. Various types of interviews can be used in qualitative research. Semi-structured interviews are often used because they allow the researcher to collect the important information about the topic of interest while allowing the participants to openly discuss their own thoughts and feelings (Sparkes & Smith, 2014). Semi-structured open-ended interviews fit within a social-constructivist paradigm, and within a case study methodology, since the more open-ended the questioning the better understanding the researcher can gain from the participants actual life setting, and properly interpret the findings (Creswell, 2013). Strengths of using semi-structured interviews in qualitative research include giving greater control and flexibility to the participants than a structured interview, while allowing the researcher to guide the direction of the discussion (Sparkes & Smith, 2014). This flexibility is especially fruitful in the case of intrapersonal knowledge research because it has rarely been investigated, thus iterating the importance of an in-depth open-ended data collection method. Prior to interviewing participants, two pilot interviews with other university coaches were conducted and video recorded. These

were evaluated and critiqued by an experienced committee member. These pilot interviews helped improve and refine the researcher's interviewing skills, as well as tested and adjusted the interview guide in consequence.

Interview Guide. An open-ended interview guide (see Appendix C) was created as a way to cover the main topics of the study (Kallio, Pietila, Johnson, & Kangasniemi, 2016). According to Kallio and colleagues' (2016) systematic review, there are five inter-related phases in order to formulate an interview guide. These phases include: (1) identifying the prerequisites for using semi-structured interviews; (2) retrieving and using previous knowledge; (3) formulating the preliminary semi-structured interview guide; (4) pilot testing the interview guide; and (5) presenting the complete semi-structured interview guide (Kallio et al., 2016).

Rubin and Rubin's (2012) interview guidelines and structure were followed in the current study. The interview guide contains the following sections: (1) opening questions; (2) main questions; (3) follow up questions and probes; and (4) summary and concluding questions. First, opening questions helped to touch base and build rapport between the participant and the researcher. Second, main questions were formulated in order to address the overarching research questions regarding the development, application, and benefits of intrapersonal knowledge in university coaches. Third, follow up questions were asked to delve deeper into the responses and gain an in-depth understanding of the data being collected. In addition to the follow up questions, a list of probes was available to assist the interview process and help manage the conversation. Finally, summary and concluding questions were included to allow the participants to provide new information. This final step ensured the participants' detailed lived experiences were captured in as much depth as possible. If more information is necessary, then a follow-up telephone interview occurred, only one of the six participants required a 15 minute follow up

phone interview for a few clarifications.

Data Analysis

An in depth thematic analysis was used to analyze the data. According to Braun, Clarke, and Weate (2016), thematic analysis is a method that identifies themes in a dataset, and is used to describe and interpret the meaning and importance of these themes. Indeed, this method organizes and describes the data collected in rich detail by identifying, analyzing, interpreting and reporting patterns within data (Sparkes & Smith, 2014). Thematic analysis suits a social constructivist paradigm because of its flexibility and its emphasis on the interpretation of data. This allows the researcher to engage in social and psychological interpretations of the data (Sparkes & Smith, 2014). Moreover, a thematic analysis highlights similarities and differences across the data sets (Sparkes & Smith, 2014).

Braun et al.'s (2016) six phases involved in a thematic analysis were followed. Phases 1-2 involved familiarization and coding. *Familiarization* was the process of deep immersion into the data, in order to become intimately familiar with its content. *Coding* represented the foundation for solid theme development. Practically, the coding process involves closely reading the data, and "tagging" with a code each aspect relevant to the research question. Phases 3-5 represent the core analytic work in thematic analysis and they include: theme development, refinement, and naming. Phase 3, *theme development*, clusters together the codes in order to identify candidate themes at first, and eventually overarching themes and patterns. Phase 4, *refinement*, or reviewing, involves working back into the coded data, and then back into the entire dataset. There are two rationales for the refinement stage: first, reviewing is done to make sure the analysis matches the data and that no misinterpretations are made; second, reviewing ensures that the analysis is compelling and coherent especially towards the aim of the study and

the research question. Phase 5, *naming*, involves capturing the essence of each theme by giving it a proper title. This phase also involves refining themes into possible sub-themes. Sub-themes are useful for structuring large and complex themes. Indeed, it is important to not have themes that are too diverse and complex. Naming themes also helps to tell the story and make sure the analysis is coherent to the reader. Phase 6, *writing up*, further involves compiling, developing, and editing existing analytic writing, in order to situate it within the overall story. This phase must embed the themes within an analytic tale, and provide proper in-depth interpretations of the data. Because thematic analysis has a strong emphasis on interpretation, and co-construction of knowledge, it is not confined and restricted by specific theories (Sparkes & Smith, 2014). Therefore, the results are generally easy to understand and are accessible to the general public. In turn, thematic analysis is often useful to produce qualitative analyses which can inform policy development (Sparkes & Smith, 2014). This is relevant to the current research, since most coaching development programs do not include an intrapersonal knowledge component. So, a thematic analysis can potentially be useful for informing formal coach education programs through including an intrapersonal dimension to their curriculum.

Validity, Quality Standards, Trustworthiness

Evaluating qualitative research by the same standards of quantitative research through objectivity, reliability, generalizability and validity is problematic because of the subjective nature of qualitative research (Sparkes & Smith, 2014). This is especially important to consider given the 68% increase of qualitative studies published in three North American sport and exercise psychology journals (Journal of Applied Sport Psychology, Journal of Sport and Exercise Psychology, and The Sport Psychologist) between 2000-2009 (Smith & McGannon, 2018). With continuously growing numbers of qualitative studies, comes increasing numbers of

methodologies, therefore questions of rigour are of utmost importance to ensure quality research. Most often, quality standards of qualitative research are based on Lincoln and Guba's (1985) trustworthiness criteria composed of: credibility, transferability, dependability and conformability. Although these act as qualitative parallels to the quantitative standards of quality research, these criteria themselves are subjective and thus still debated (Sparkes & Smith, 2014). Sparkes and Smith (2014) offer reflexive self-awareness in order to recognize one's own biases through disciplined subjectivity. This disciplined subjectivity suggests that good bias in research is unavoidable and necessary, and will also ensure rich rigour during the entire process. Three methods were utilized over the course of this study to be reflexive and ensure the researcher practices disciplined subjectivity: (1) critical friend, (2) member reflections, and (3) commitment and rigour.

Critical friend. Traditionally, qualitative researchers utilize inter-rater reliability in order to ensure the results are reliable. This method ensures the results are reproducible and consistent by employing intercoder reliability and intercoder agreement. This requires two or more experienced researchers working separately to independently code data without negotiation (Smith & McGannon, 2018). The researchers must then reconcile their differences in coding through discussion, and the process is over when a high level of agreement or consensus has been reached (Smith & McGannon, 2018). Although this method seems appealing and remains widely used, it does not accurately ensure that qualitative research is reliable. The biggest issue with the method is bias; inter-rater reliability will always be influenced by the background of the researchers as well as the power, age, and gender relations that operate between them (Smith & McGannon, 2018). Quality can be achieved through other ways such as the use of a 'critical friend'. This process involves a critical dialogue between people, with researchers explaining

their interpretations to these other people who listen and offer critical feedback (Smith & McGannon, 2018). Unlike inter-rater reliability, the aim of a critical friend is not to agree or achieve consensus, rather it is to promote reflexivity by challenging each other's biases and construction of knowledge (Smith & McGannon, 2018). In addition, a critical friend serves to provide a theoretical sounding board to encourage reflection on alternative interpretations of events and the analysis of the data (Sparkes & Smith, 2014). This then can help the researcher identify the perspective, or bias, they bring to their study and anticipate how this can affect how they analyze, interpret, and report the findings. For the present research, the critical friend was a member of the research team who was consulted at each stage of the analysis. The critical friend helped in naming the different codes through every interview transcript, as well as regrouping the codes and naming the themes, to ensure more than one researcher's perspective was interpreting and analyzing the data.

Rigour and commitment. There are multiple criteria used for judging excellence in qualitative research. One of those involves *rich rigour*, which according to Sparkes and Smith (2014), refers to the use of sufficient, abundant, and appropriate theoretical constructs, data and time in the field, samples, contexts, and data collection and analysis processes. Rigour in the present study was practiced throughout the research process, for instance during the purposeful sampling of the participants based on the specific recruitment criteria. Another example of rigour was the use of two pilot interviews. As mentioned previously, these pilot interviews helped the researcher practice their interviewing skills, and tested the interview guide to see if changes needed be made.

Commitment in this study was further engaged through other criteria of judging excellence in qualitative research (cf. Sparkes & Smith, 2014). *Significant contribution*, involves

providing a significant contribution conceptually/theoretically, practically, morally, methodologically and heuristically. Through this research, significant practical contributions to coaching will be made by exploring the intrapersonal knowledge and practices of successful coaches. There is also potential for moral contributions to the field, since high intrapersonal skills have been found to have psychological benefits, which can lead to improving both coach and athlete well-being. Finally, commitment in this research was implemented through the *ethical* criteria of judging excellence in qualitative research. This criterion suggests the research considers procedural ethics, situational and culturally specific ethics; relational ethics; and exiting ethics (Sparkes & Smith, 2014). As mentioned above, through member reflections, many of these ethical considerations were engaged in by actively involving the participant in critical discussions with the researcher. Furthermore, throughout the process, the researcher engaged in journaling reflexive field notes, in order to increase thoroughness by capturing information that might not appear on audio tapes or transcripts during data collection.

Chapter 4

Results

This chapter will present findings from the interviews conducted with six experienced female Canadian University coaches. The interviews ranged between 64 and 156 minutes, and averaged 91 minutes. The six interviews were transcribed and yielded 88 pages of single-spaced text, which resulted in 473 data extracts, from which 40 codes emerged. These codes have been alphabetically organized in Table 1. The number of data extracts ranged between 70 (C4) and 93 (C5). The variation in number of extracts does not have any significance. In fact, implying more is better would be misguided, given that coaches expressed themselves differently and at varying depths. The difference in numbers illustrates the nature of using open-ended interviews by allowing coaches to express their views in their own way with limited constraints. Quotes from the coaches will be followed by a pseudonym (e.g., Marie) to protect the confidentiality of the coach who provided the excerpt. Three higher order themes emerged from the analysis and will be presented below, *Coaching Career and Development, Coaching Environment and Atmosphere,* and *Personal Growth and Prosperity.*

Coaching Career and Development

This overarching theme represents aspects that shaped a coach's career and progress. Each coach had her own individual make-up and lived different experiences as athletes and coaches that led to their University head coaching position. To start, all of the coaches described ways in which their personal background, particularly through athletics or education, influenced their professional careers.

Personal background. The majority of the coaches had a very successful athletic career, with five of the six coaches playing for their national team. All participants felt their experiences

as an elite athlete helped shape them as coaches. Some of the skills they developed as high level athletes included communication, self-confidence, and self-awareness. For instance, one coach discussed how her athletic career increased her awareness of being in the moment:

> I became very aware of how important it is to be immersed in the moment to give yourself a chance to be your best and not let those strenuous things creep in. I mean they do creep in big games, you're on the free throw line and there's two seconds left and the game is tied, or you're down one, can you hit them or not. Well you have to be able to just take care of those things. I think going through that experience as a player really reinforced the importance of simplifying things to what do I need to do right now, and not letting your mind wonder into the future. (Denise)

The one coach who did not play for her national team started coaching at a younger age. She played at the collegiate level, and stopped because there was no basketball program at her University. Aside from her athletic career, this coach acquired information about high level competition from her master's degree in sport psychology:

> Another super important point for me was my master's degree. There's no question that it shaped and formed everything about me and my coaching. In the moments of despair, so to speak, and you feel like a failure, I remember thinking and going back to my master's. I remember those coaches whom I interviewed telling me that they did not always make the right decision, they were not always perfect. They missed opportunities as well, they made some bad calls. This painful loss has to teach me something alike to what these coaches were talking to me about. (Carole)

In sum, these coaches' earlier life experiences as elite athletes or (graduate) student, contained lessons that they consciously incorporated into their coaching repertoires. This information also showed that they were aware of how they became successful coaches.

Coach characteristics and behaviours. All the coaches discussed their personal attributes and behaviours and how they shaped their career and progress as University coaches. For instance, they all discussed awareness concerning their coaching style and the importance of self-confidence. Reflecting on their coaching styles, the coaches were able to describe how their

behaviours intentionally differed depending on the context, including during practices: “I’m always pretty calm in games, I’m all about focus. I’m all about supporting and everything is good, everything has been very positive. In practices I’m hard, in games never” (Carole). More specific than their coaching styles, a majority of the coaches felt self-confidence had a powerful impact on how they behaved and reacted in certain situations. Self-confidence was a skill that had to be developed and reflected upon during difficult situations. For instance, one coach explained her process of relying on confidence when facing younger opponents:

> You have to trust yourself because you aren’t able to follow the pace of the coach who is 10 years or 15 years younger, single, with no kids, and is able to recruit everywhere all the time. You tell yourself, “ok, I’ll beat him anyway, I’ll find a way, and I don’t need to be everywhere”. You have to convince yourself, and you have to have confidence in your capabilities. (Rose)

Furthermore, coach self-confidence was viewed as a crucial component during important games. One coach explained the importance of confidence to win a National championship:

> I look back at that and think I should never have changed, because even with that change, I think it shows to the players “oh my god, why is coach making these changes, something must be up”. So, I think that added to the fact that we didn’t feel so great about ourselves coming out of the conference championship, so you feel a little bit of doubt. To win a National championship you can never have doubt, ever, you are going in to win it regardless, you refuse to lose basically. (Trish)

In addition, four of the six coaches explained how being a female coach affected how they were perceived by male coaches. More specifically, they felt the pressure to prove themselves, including during coaching certifications and licensing:

> I’ve always felt that I’ve had to work very hard to get the respect of my male colleagues. In soccer coaching license, you have to demonstrate that you can play. When I took the course, there were never any females, so I was put in with all males. I was pretty confident and a good player, but that was always a challenge to me. I made it a challenge because I wanted to show that I could play and wanted the male coaches’ respect. (Trish)

> I've been treated differently as a woman coach everywhere all the time. You have to live with it. You can either bitch and complain about it, or you just roll with it. So many times, all the licenses I've had to pass as a coach, I was the only female. I've never gone to a coaching license where there was another female. I had to always defend women coaching soccer all the time. (Sarah)

A variety of the coaches' personal, athletic, and coaching experiences contributed to their awareness concerning their current coaching behaviours. The coaches were able to develop important life skills during their athletic careers that translated well into their coaching, such as being in the moment. In addition to personal characteristics, a coach must be aware of her environment.

Coaching Environment and Atmosphere

A coach's environment and atmosphere represent the contextual and situational circumstances that affect their job. Some examples of contextual factors coaches needed to consider included team dynamics, athlete problems on and off the court, recruiting, and team communication. The results showed how certain team factors, athlete factors, and different coaching challenges came up as aspects a coach must deal with.

Team factors. Coaches discussed various team factors which included recruiting and maintaining the team culture. Other team factors that coaches regularly dealt with included team communication and other team dynamic issues. One coach explained her thoughts on the recruiting process:

> I am still recruiting, so there are reflections about which athletes we need to focus on. Are those athletes good enough, because we do have to focus on quite a big number of athletes before we make the final decision on who we can recruit. Then we see who has more of a tendency to choose this school, or if the odds are not so great we have to think about who else is available. So, those kinds of reflections are happening on a weekly and daily basis depending on where our priority is right now. (Alexa)

In addition to recruiting, coaches mentioned some of the struggles building the team culture. For example, one coach explained the work it took to build up the program's culture over the years:

> The University became a place that you went for school, and basketball you could play on the team. It took a while to build the program, when I took it over, it took a lot of years of putting in that brick, trying to do the right thing, changing the culture, developing your team culture. (Denise)

Establishing a team culture was difficult, but maintaining it was just as difficult and required a lot of reflection. For example, one coach explained having to remove some talented players from the team because they were threatening the team culture:

> There's not one player, independent of how good they can be, that is above culture. I just made the decision and again it's "next play". But you think about this, I wonder if we should just move forward, but the team is better for it today. Maybe the team would have been better if they would have stayed, but we're good now in terms of culture. (Carole)

Coaches dealt with issues concerning team structure on a daily basis, especially concerning recruiting and team culture. In addition to team factors, all coaches discussed in more depth some individual athlete factors that required daily thought and analysis.

Athlete factors. The aspects of an athlete's life that coaches must deal with and manage were discussed by all the coaches. Some examples were dealing with accountability, academics, and emotions. All coaches noted the importance of effective interpersonal skills to manage these athlete factors. Often coaches needed to reflect on themselves, and the specific coach-athlete relationship, to better manage each situation, including treating some athletes differently:

> It all depends on the atmosphere on the team, sometimes people are better to be left alone, others need to be talked to more often. I had players I had to give individual feedback almost every game, because they needed that. University soccer is also a lot of long bus rides, so that is a good time to sit with players. (Sarah)

Additionally, coaches reflected on how their athlete's emotions and stressors impacted their own emotions:

> Of course, my athlete's emotions affect my emotions. You know, we work hard for the same objective. If our goal is to go to the Canadian championship at the end of the year, then every little spot you trip on delays us. What will it do, influence us positively, negatively. It's your best player and she failed at school, and she is stressed out because she isn't succeeding in school. Well then you want her to perform on the court because that has an impact on the team's result, which has an impact on you. So, that's the side you need to learn to unload. (Rose)

Coaches were also aware of treating their athletes differently depending on their seniority in the program:

> I treat the freshmen so carefully. They are our babies, we have to protect them, they are important, they barely can do any wrong. In fact, if they do I'll often yell at a second or third year about it, not at them ever. In their second or third year, I start to be a little bit harder on them. By their fourth or fifth year, then we have a pretty close relationship, they know I'm hard on them but we go to war together. They expect it, they want it, they understand, they take the responsibility, they've been groomed to feel responsible and they understand why. So, we're more together. (Carole)

In general, coaches expressed daily reflections concerning team factors such as recruiting and components of the team culture, as well as of the coach-athlete relationship. Yet, the most often and in-depth reflections had to do with some of the challenges they faced as coaches.

Coaching challenges. These represent certain pressures and demands the University coaches regularly dealt with as part of their job. All of the coaches discussed the long hours, the constant rumination, and the looming pressure of excellence. Interestingly, most of the challenging situations had to do with athlete problems off the court or field. Further coaching challenges mentioned were dealing with tough losses and having to reevaluate themselves and their team following those hardships.

All participants explained how the constant pressure of excellence they set for themselves and their team affected their job:

> Emotionally it is draining. You know, what the athletes live, at the most, they'll live it for five years. If we try to go to the Canadian championship and we don't make it we live with that. Coaches, it's been 25 years we're living it, or like 28 years. So, at some point

> you are like "ok again another time, again the pressure, oh I have to be good". It's been twenty years that I've been telling myself this. On top of my athletic career, it's been 30 or 50 years almost I tell myself "hey I have to be good today still". There is no rest to that, it's excellence, excellence, excellence, day after day. (Rose)

Winning was seen as important validation for the coach and also for the program:

> The first championship was like "wow this is amazing", then the second one was different but at the end of it, it was "wow this is amazing" too. But it feels good because you're also building that tradition of excellence that's proof. Winning is proof. You might be a great team and you have a series of injuries and you never make it to nationals, but you're still a great team that's done great things, but you don't have the proof. Having those nets and those medals shows some significant accomplishment, so it's validation for the players, the program, and for the University. (Denise)

However, most coaches felt the pressure of excellence after a loss, and discussed the feelings attached to losing:

> Never recovered after that loss at Nationals. I'll never forget it, still when I talk to you now it brings up emotions. It was so disappointing. We should have won because we were so good. You don't get many opportunities, it's hard to win. That's what my experiences has led me to the conclusion that it's really difficult to win a National championship. (Trish)

Losing for all coaches led to significantly more mental review than winning:

> We talk about winning and it's really fun, but the feeling of winning you'll have it for two weeks maybe. The feeling of a loss that will drag on for a month, two months, if not more. So it's tough, and how do you get over it. To say no I'll start over, I just lived the worst loss of my life, it'll take me two months to get over it. But I'll start over again next season. The victories are easier, but they don't last as long, your euphoria is two weeks and it's finished. (Rose)

With all of the previously mentioned challenges, the coaches explained how demanding this profession was, even leading to some serious symptoms of stress and burnout: "On a personal level, it was demanding a lot of time and energy. To a point of being physically burned, mentally. So, at that time I was pretty close to a depression" (Rose).

> When you're in it you don't really think about how tired and burnt you are. Every year you feel a little more frustrated, it builds up, and you don't realize it until you're not in it anymore, then you just look back. As the years went on I got fed up with this, then fed up

> with that, so it was just an accumulation of all kinds of things that you don't worry about when you are first in it, but after a while it starts bugging you. (Sarah)

> I noticed being physically drained. Yeah it took a while because it's always go, go, go, and I would take advil, oh my head hurts again just take another advil oh whatever. I just realized what am I doing, my head hurts I should slow down. Or if I didn't have time to eat it was I'm not going to eat, or it would be I'll go grab takeout. Then you don't feel good, my stomach hurts I would get acid reflux. So, it was just go, go, go, go. It took me a good ten years before I realized I need to relax here, it's only basketball, nobody should die. (Carole)

The coaching environment included a number of aspects ranging from building and maintaining a team culture, dealing with athletes' emotions, and handling the pressure of excellence. Coaches explained how difficult the coaching profession could be, and the impact it had on their emotional and physical wellbeing over the years. Although many challenges were discussed, coaching was also described as a worthwhile and enriching career. The next section will present how coaches lived personal growth and prosperity within their coaching practice.

Personal Growth and Prosperity

Factors contributing to personal and professional growth, happiness, and well-being are covered in this category. Coaches valued continuous learning as a way to grow and self-improve. Some of their methods included reading coaching books and journal writing. Additionally, a meaningful source of knowledge was learning from mentors. Finally, the coaches covered some of the rewarding moments of coaching, such as athlete appreciation and memorable coaching moments. Three subthemes emerged to explain how coaches achieved personal growth and prosperity: their quest for learning, developmental agents, and coaching gratification.

Quest for learning. A coach's quest for learning included the techniques used to seek knowledge and growth. Reflection was considered to take place consistently throughout the year:

> I think as a coach you're reflecting every day. You're always evaluating whether or not the session went well. What were the interactions with the players like. I'm the type of coach I want everybody to be happy, it really bothers me if people

> aren't happy. Now, that's almost impossible to keep everybody happy. The players that play are happy, but even then, sometimes they aren't happy. Sometimes they want more playing time. So, it's always a constant, day to day reflection. (Trish)

> I don't have a specific time to reevaluate myself. It happens all the time progressively, even throughout the season it happens. We win a game, ok it's nice. We lose a game, why? We should have done this. In the end we reflect pretty often. And for me, it happens a lot that I'll find solutions in the middle of the night. It's not because I don't sleep. It's that at some point I'll fall asleep on it, and I'll wake up and I have a solution that happens. I'll leave with that the next morning. (Rose)

The depth and frequency of the reflections fluctuated depending on the time of the season:

> I'm always reflecting. I mean probably the most obvious time is in the post season. That's a hard one because most often your season ends on a loss. There is that abrupt halt, which is a very difficult part of coaching. Reflection on players, reflection on system, reflection on values of the program, how you can get messages across, everything. (Denise)

Stressful parts of the season led to less self-reflection and was seen as a barrier to introspection:

> When we get to playoffs, or when we get to stressful parts of the season, I for sure self-reflect way less. I'm a lot more focused on watching game tape, what's the task at hand. I'm very task oriented, I'm not so much focused on myself or introspection. That I've noticed about me. Sometimes a more focused person comes across stronger or ruder, more intense, because you are so focused on their task. That's something I've noticed. Those are times that you don't ask me about my level of stress or my health, I'm not really thinking that way. I'm thinking all for what's going on right now for the game, or the playoffs, or the stretch of tough time. So the barrier would be high competitive periods, with many games in a row. Yeah there's not much self-reflection on me as a person at that point. (Carole)

One coach felt constant reflection led to over-reflection and impeded her decision making:

> Well I think reflection is always important. The problem is sometimes you're reflecting so much that it impacts the time that you should be doing your decision making. You're constantly reflecting, why did this happen, why this, why that. We have to play on the weekend, and I'm still trying to decide on certain things and reflecting. Reflecting on this player, and I don't know why she's struggling to

> play, but if I don't start her I'll destroy her confidence. I don't want to do that, but is that fair to the other player that's been doing really well. So, when you're talking about reflecting, those are the sorts of things that you are reflecting on. (Trish)

Reflection was a regular practice for all coaches and was an important problem-solving process leading to growth. Another significant aspect of growth and learning was self-improvement. Some of the ways coaches self-improved was through experience and learning from certain game situations:

> Well that game was a turning point in my coaching career because I was very active on the sideline stressing and almost playing the game for the players. That game taught me a lesson in terms of let them play. So, I became a little less active. (Sarah)

Knowing oneself, through self-awareness, was another key to continue to get better and self-improve as a coach:

> I think I am a better coach because I got to know myself a lot better. Now, I can see clearly "oh this is what it's all about", and this is who I am. Before I was confused about who I was, what I liked, or what I didn't like, or why things were bothering me. It's about the way we perceive things. Self-awareness was a big piece to find peace within me in terms to figure out what I wanted to do later in life. (Alexa)

Besides game experiences and self-awareness, engaging in continuous learning was another means to self-improve and further progress as a coach:

> So, for me I find I'm learning every day, it's not like I know it all, I never hit the pot. I know a lot, I've seen a lot, I've got a lot of things in my head, but there's always a little lightbulb going on and oh that's interesting let me have a look at that. I'm perpetually learning and I try to give that to my players too, I think it's really affected the way I coach. Let's do some new stuff, try to come at this a different way, let's add a new dimension that might be exciting for the athletes to be a part of. (Denise)

Continuous learning was valuable to self-improve daily. However, the coaches' long term personal and professional growth was credited to lifelong learning. Learning throughout one's

career was not restricted to sport-specific knowledge. One coach explained how she learned and adapted her coaching to the younger generations of players:

> I think that you're learning every day. It sounds very cliché, but it is true. You see new things. I've been coaching for a long time and for that player to refuse to meet with me is kind of odd. That's never happened, so now I don't have any experience with that. When I called my coaching colleague, she goes I've tried that and they won't come in and meet with me. I go what do you mean they won't meet with you? So, we have people refusing to meet, I think it's wrong. (Trish)

Although the coaches valued lifelong learning, one coach expressed her realization that she will never saturate her coaching knowledge, and being a good coach is ultimately more meaningful: "It's maturity with age you realize that you know less and less, and there's no need for ego anymore. When I was younger I wanted to show that I was good and I wanted to win, but now it's I just want to be healthy, happy, and a good coach" (Carole).

The quest for learning involved varying techniques for gaining knowledge and personal growth. Daily reflections were a certainty for the coaches, but different types of reflections occurred at different times of the season and at varying depths. The coaches also sought out to constantly self-improve and become better coaches. Additionally, seeking lifelong learning included sport-related information, or adapting to player-relationships through the years and generations. Learning was not restricted to an individual process, all of the coaches discussed learning from a vast amount of people from different backgrounds.

Developmental agents. These are the people who played an active role in advancing the coaches' careers by providing developmental assistance. All of the coaches discussed the influence of a mentor and the knowledge they gained from them. Interestingly, all of the coaches had non-mentor learning opportunities as well. This meant the coaches learned from non-coaches where they were able to transfer this knowledge into their coaching repertoire.

All of the coaches mentioned the importance of having a coaching mentor. The mentors ranged from being formally assigned, to being informally consulted former coaches, or even current competing coaches. The mentors were good sources of sport knowledge, particularly in helping them manage and refine their emotional intelligence skills:

> I was looking for somebody who had more experience, and who would have time to mentor me in things that had to do with basketball. But also how I can become more emotionally intelligent. How can I handle and manage my team better, how can I handle difficult situations with my players, drama, cutting a player and recruiting. Those were the discussions I wanted answered. (Carole)

In addition, mentors helped with organizational aspects of coaching by sharing resources:

> She was another one that I trusted, she was a friend, and she helped me very early on in my career understanding all the aspects that come into coaching, even with summer camps and some of the community work and she shared some ideas and resources with me early on. (Denise)

Aside from being good sources of knowledge, mentors were also inspiring people to the coaches. In some cases, they were the reason they became coaches:

> During that time I was approached by the technical director of the soccer association, he had trained me as a national team player, and he wanted a female to coach the provincial team. I said I don't think I'm ready, I don't think I'm good enough as a coach. He said you'd be great and actually he twisted my arm. That's how I started becoming an elite coach. (Trish)

Although all the coaches had mentors in their sport, many of the participants learned a lot from influential outsiders. Some of these included family members, University professors and staff members, or other sport coaches and colleagues from their schools. One coach particularly learned a lot from her master's thesis supervisor while another learned from a former teammate:

> First influential people were all the coaches I interviewed for my master's degree, it was an eye opener. Then there's my masters' degree supervisor, he was super influential in making me read the right things. Making me understand the importance of vision, or life skill teaching, things I didn't really know. (Carole)

> I would say a teammate of mine on the National team whom I played with for ten years. She went on to coaching pro in Europe, at the University level in the US. She is still a friend. She is a basketball brain. She always has great insight and some of it is about the on-court stuff, but some of it is about the art, the art of coaching, and understanding the lifestyle of coaching. (Denise)

Other non-mentor role models were female faculty members:

> Lots of the female role models that I have were women in the faculty of physical education and recreation at the University where I studied. We had strong women that were real trailblazers and strong. They were on equal footing with the men, and they let people know that. I learned from those women to always stand up for what you believe, and always fight for what you believe. Myself, at the time as a student we were on the University's women's athletic board, and I was the president, and my teammate was the vice president. We felt that we should have a women's soccer team at the University, we didn't have one. So, we had to lobby, and we had to fight. (Trish)

Developmental agents represented a number of influential people who contributed to the knowledge and development of the participants' coaching career. Mentors were crucial for developing professional knowledge and sport-specific information when needed. Furthermore, the coaches also sought interpersonal and intrapersonal knowledge from their mentors, such as learning about athlete management and increasing their own emotional intelligence. Non-mentors were also considered influential people in the coaches lives and contributed to their growth. The non-mentors' taught the coaches how to navigate the coaching lifestyle and self-empowerment skills as a female in a leadership position. The development of a coach's knowledge required a lot of hard work and multiple sources over years, ultimately leading to progress and growth. This hard work resulted in a number of positive outcomes and feelings of fulfillment.

Coaching gratification. This section includes experiences and factors that made coaching worthwhile and rewarding. The coaches mentioned athlete appreciation and helping

them get better in their sport and as people outside of sport. Some coaches discussed the memorable coaching moments attached to a championship win or a significant victory. Furthermore, having a healthy work-life balance was seen as a reason for remaining in coaching, as one coach expressed the importance of disconnecting because of the emotional baggage associated with the job:

> Finding something outside of coaching is good because you have to be able to let go daily. You have to be able to disconnect at some point. I'll be there for the athletes, like the facilitator. I'll be there to bring the athletes there, and push them, and lift them. I can't say that emotionally you don't get involved, you have them five years or four years, so you know them and at some point they leave and it's done, and okay let's move on to other things. (Rose)

In addition to personal growth, the participants felt coaching was most rewarding when witnessing their athletes' growth and maturation over the years: "I really enjoy providing the opportunity for young people to have a really strong experience through that really formative time of their life" (Denise).

> Coaching is something that is rewarding. When you see someone leave, and are more mature, and they've grown. In the end, you look for the little ways to say what I'm doing here helped someone, and to validate yourself in there a little bit. (Rose)

Personal and professional growth were not dependent on winning, but it was seen as proof and validation of their knowledge and hard work. The current coaches won a combined 11 U Sport National championships, but that wasn't the most important thing to them:

> It's funny, when we won another championship, I was simply really happy. I didn't care if anybody knew about it. I was just so happy, this one was for me. This one was really special. Before when I would win, I would think 'I won my first championship, I'm a good coach. As if I had something to prove. Now I just want to coach. I still want to win because I am competitive, but it's a healthy competitiveness instead of using it as validation for myself. I'm actually a happy person. (Carole)

Chapter 5

Discussion

The purpose of this study was to gain insight into the development, application, and perceived benefits of intrapersonal knowledge in successful female university coaches. The development and application of intrapersonal knowledge mainly involved reflection and lifelong learning and improvement. Applying intrapersonal knowledge techniques varied from coach to coach, and depended on the time of the season. Finally, the benefits and implications of gaining intrapersonal knowledge were vast and included increased emotional intelligence, becoming aware of physical and mental symptoms of burnout, and understanding one's position as a female coach within the broader sociocultural context of a male dominated field. This chapter will discuss the results as they pertain to previous research.

Development and Application of Intrapersonal Knowledge

The following section will describe how the coaches in the present study were able to develop their intrapersonal knowledge throughout their careers, including applying it to their current coaching practices. More specifically, this occurred through reflection and lifelong learning.

Reflection. Reflection is considered paramount for improvement and developing self-awareness in coaches (Gilbert & Côté, 2013). Specifically, self-reflection allows for coaches to identify areas needing improvement and change (Gilbert & Trudel, 2001; Strand & Christofferson, 2017). Taylor, Werthner, Culver, and Callary (2015) found that reflecting on experiences allowed coaches to learn how to adapt and more effectively coach their athletes. The current results found that self-reflection was an important tool for self-evaluation leading to growth and improvement. The coaches explained reflections happened daily and throughout the

season. The topics of reflection were diverse and included: evaluating a game or practice, evaluating their athletes' happiness, the values and norms of their program, and how to communicate effectively. All of the coaches agreed that losses led to more reflection than wins, especially at the end of the season. The coaches in the current study did not learn reflective skills from a formal workshop or coaching certification, yet all practiced reflection, and seemed to have developed their reflective skills mostly from experience. Previous research illustrated the importance of reflection for coaches' development and growth, however multiple studies on coaching have studied reflection as a broad concept, without identifying the types of reflection investigated, especially concerning the timing and depth of reflections (Gilbert & Côté, 2013).

Research on the timing of reflections (i.e. utilizing a 'before, during, and after approach' to reflection on experiences) suggests coaches can learn to adapt and more effectively coach their athletes (Taylor et al., 2015). According to Gilbert and Trudel (2001; 2005), effective coaches transform experience into knowledge through different processes of reflection involving varying time frames, and is triggered by a coaching issue: (1) reflection-in-action (during games or practices), (2) reflection-on-action (in between games), and (3) retrospective reflection-on-action (after the season). The coaches in the present study engaged in all three of these types of reflections, although 'what' coaches reflected on depended on the time of the season. Indeed, depending on the different timing of reflections and the timeline of the season, a change in topic, or focus, of their reflections occurred. For instance, during stressful parts of the season where reflection-in-action occurred, little self-reflection took place. Instead, coaches preferred to focus on the task at hand, avoiding their levels of stress and even their health. On the other hand, the off-season was a key time for introspection and self-reflection. Previous research has found a lack of time to be a barrier for reflection (Knowles, Tyler, Gilbourne, & Eubank, 2006). Indeed,

coaches in other studies have mentioned making time for reflection difficult due to unsociable hours, and the difficulty of reflecting within the continuous cycle of long hours in sports coaching (Knowles et al., 2006). Although coaches in the present study did not directly mention a lack of time, the timing and depth of their reflections do parallel Knowles and colleagues (2006) findings. The current coaches self-reflected less during the busier time of the season (i.e., playoffs), and reflected more when they had time (i.e., off-season). This further suggests the coaches do not have the proper structure or resources in place to engage in self-reflection and introspection during high pressure moments in the season, when increased self-awareness could be beneficial. Additionally, related to timing and frequency of reflections, coaches in the present study mentioned over-reflection impeding on the decision-making time. The latter illustrates the importance of teaching realistic and structured self-reflective skills in coaching development programs such as the NCCP to avoid excessive reflection.

Furthermore, in Gilbert and Trudel's (2001) model of reflective practice, reflection is triggered by a coaching issue. According to the researchers, coaching issues provide the motive for the coaches' reflection, and thus engage in the experiential learning process (Gilbert & Trudel, 2001, 2005). Examples of coaching issues in youth sport include: athlete behaviour, athlete performance, coach profile, parental influence, and team organization. The latter suggests the "why", or the cause of coaches' reflection to be tied to an issue. However, the coaches from the present study did not exclusively view reflection for problem-solving; instead, they used reflection as an important tool for self-improvement and growth. The coaches used reflection as a consistent continuous process occurring naturally after every practice, game, or event, regardless of the current situation/context. Previous research supports this finding that reflection does not need to be exclusively used for problem-solving (Knowles et al., 2006; Gallimore,

Gilbert, & Nater, 2013). Indeed, Gallimore and colleagues (2013) followed the reflective practice of a high school basketball coach over a period of 10 years, with guidance from legendary coach John Wooden. Among the findings, it was determined that reflections were used to implement innovations and enhance one's coaching practice (Gallimore et al., 2013). Knowles and colleagues (2006) interviewed six coaching science graduates who defined reflective practice as, "a form of analysis, a process of evaluation and an improvement tool to produce change in practice" (p. 169). The coaches in the present study used reflection for both problem-solving and growth. Therefore, this finding elaborates on the 'why' coaches use reflection, and supports previous research asserting reflection should not solely utilized to solving issues, but also as a tool for innovation, growth, and self-improvement.

In addition to different timing and topics of reflections, researchers have considered the varying depth of reflections. Knowles and colleagues (2006) identified three levels of reflective practice. The first level, *technical reflection*, involves the standards, competence, and tactical aspects of one's practice. The second level, *practical reflection,* refers to exploring areas of personal meaning. Finally, the third level, *critical reflection*, involves coaches understanding how social, political, and economic factors might affect one's behaviour. Knowles and colleagues' participants showed no evidence of critical or practical level reflections, even though the coaches had followed a structured reflective practice course within their coaching science degree. This illustrates how reflective practice in theory does not always apply the same way in a "real world" context. There was evidence that the coaches in the present study applied all three levels of reflection, in spite of having no reflective practice training. Technical reflections happened most often, where coaches explained reflecting on technical issues such as tactics, and making adjustments after practices. Practical reflections involved thinking over one's coach-

athlete relationships. Finally, critical reflections mainly took place because the female coaches understood the implications of their position within a male dominated field. These findings illustrate some of the issues with teaching reflective practice, and the application of theories in practice. Indeed, the coaches in previous studies who had reflective practice training did not implement the three levels, whereas the coaches in the present study, without training, did reflect at all three levels. Some can speculate on the reasons for these differences, such as the current participants were all females, had multiple years of experience and NCCP levels, and coached at the University level for a number of years.

The findings of the current study complement previous coach reflection research (Gilbert & Trudel, 2001, 2005; Knowles et al., 2006; Gallimore et al., 2013) by supporting the use of reflection as a crucial part of coaching development and improvement, even at its highest level. 'When' and 'what' coaches reflected on was exemplified by all coaches reflecting daily on numerous subjects and areas, involving themselves, their players, or their program. Different times of the season led to different intensities in reflections, the playoffs providing less self-reflections and more action-oriented reflections. The off-season initiated deep introspection and self-evaluation concerning the season that had just past and preparing for the up and coming season. 'Why' coaches reflected included problem-solving, innovation, self-improvement, and growth. Reflection could provide a bridge linking knowledge gained from experience, observations, coaching theory, and coach education. However, more work must be done applying reflective practice to a "real world" context, addressing all the demands a coach might face and determining the most effective type of reflection in different contexts.

Lifelong learning. In addition to the "when", "why", and "what" of coach reflection, the current study addressed which individuals influenced their acquisition of intrapersonal

knowledge (the "how"). A key process for facilitating self-improvement and growth is by engaging in lifelong learning (Bloom & Salmela, 2000; DeMarco & Mccullik, 1997; Lara-Bercial & Mallet, 2016; Wiman, Salmoni, & Hall, 2010; Vallée & Bloom, 2005). The following section will describe techniques the current elite coaches utilized in order to continuously learn and grow throughout their careers. More specifically, this included learning from experiences, which was facilitated by reflection and self-awareness, and learning from various sources of influential people, namely a mentor.

Regardless of years of experience, the coaches in the present study used self-awareness to learn from daily experiences, and understood daily opportunities for improvement and growth. The coaches' commitment to continuously learn and self-develop through heightened awareness are comparable to previous coaching expertise research (Vallée & Bloom, 2005; 2016; Donoso-Morales et al., 2017; Wiman, et al. 2010). As previously mentioned, all coaches were committed to daily reflection, which provided evidence for high self-awareness and the desire to continuously surpass themselves. Specifically, in this study, coaches utilized self-awareness to recognize unsatisfying coaching situations and consequently adjust their coaching behaviours (Lara-Bercial & Mallett, 2016; Millar, Oldham, & Donovan, 2011; Smoll & Smith, 1980). Examples included learning not to stress out on the sidelines, being in the present moment, as well as eliminating doubt and developing confidence during important games. In addition to utilizing self-awareness to assess their own feelings and behaviours, the coaches exhibited heightened awareness concerning their athletes' feelings and behaviours. High self-awareness and the understanding of athletes' needs aligns with high levels of emotional intelligence (Chan & Mallett, 2011; Lara-Bercial & Mallett, 2016). For example, coaches consciously treated athletes differently depending on their seniority on the team, and on the athletes' coaching style

preferences. Even though self-awareness is deemed important for coaching effectiveness and expertise, little sports coaching research has focused specifically on this area of research (Millar, Oldham, & Donovan 2011; Smoll & Smith, 1980). In fact, some coaching research has found that coaches actually have little understanding of how their verbal behaviour influences their athletes, and often have inaccurate perceptions of how they behave (Millar et al., 2011; Smoll & Smith, 1980). Yet, the current findings shed a different light as the current coaches were aware of aligning their behaviours to their athletes' needs. These differences might be due to the level of coaching and years of experience of our sample. Or, these coaches were naturally more introspective, inheriting high self-awareness, which allowed them to advance so high in the coaching ranks. Therefore, future research could attempt to determine whether experienced coaches are inherently more self-aware or if they develop this practice over time. If they are reflexive, is it a result of exposure to coach development programmes (Gilbert & Côté, 2013; Lefebvre, Evans, Turnnidge, Gainforth, & Côté, 2016)? Furthermore, due to our exclusively all-female sample, questions concerning the role of gender in intrapersonal knowledge and self-awareness surfaced. Future research could attempt to fill a combination of gaps in the literature by studying intrapersonal knowledge as a focus and the impact of gender differences on self-awareness by interviewing both male and female coaches.

Learning from experiences by means of reflection and self-awareness partly demonstrated "how" coaches engaged in lifelong learning. Additionally, coaches gave insight into who helped them continuously learn, including family members, old teammates, coaching colleagues from other sports, and University faculty members. These coaches' openness to feedback from multiple sources aligns with coaching expertise research where coaches not only

request feedback from their athletes and mentors, but from other leaders in their lives outside of coaching (Strand & Christofferson, 2017; Vallée & Bloom, 2016; Wiman et al., 2010).

Besides learning from faculty members and outside leaders, all of the coaches cited support from a mentor as their most meaningful source of knowledge acquisition. Mentoring has been identified as an important tool in coach development (Bloom, 2013; Bloom, Durand-Bush, Schinke, & Salmela, 1998; Irwin, Hanton, & Kerwin, 2004; Wiman, Salmoni, & Hall, 2010). Working with and learning from more experienced coaches generally remains an informal process for the majority of elite coaches (Bloom, 2013; Koh, Bloom, Fairhurst; Paiement, & Kee, 2014). All but one of the sampled coaches' mentors were informally consulted, highlighting the lack of formal mentoring opportunities in coaching (Bloom et al., 1998; Fairhurst, Bloom, & Harvey, 2017). Five of the six coaches in the present study informally sought out mentors. Similar to previous research, finding a mentor was a case of being in the right place at the right time (Bloom et al., 1998; Fairhurst et al., 2017). Mentors were considered good sources of sport-specific knowledge and improving their emotional intelligence (i.e., monitoring one's own emotions). The use of a mentor to improve one's emotional knowledge and sport-specific knowledge further suggests the three types of coaching knowledge (i.e., intrapersonal, interpersonal, and professional) are highly related and form a triad of knowledge (Côté & Gilbert, 2009). Thus, coaching education programs, which have traditionally focused on professional, and more recently interpersonal knowledge, must now attempt to include intrapersonal development as well, since it is an integral part of coaching effectiveness and expertise (Côté & Gilbert, 2009; Gilbert & Côté, 2013; Wiman et al., 2010). The present study suggests mentors can be a useful tool for lifelong learning, coach reflection, and developing important intrapersonal skills, such as emotional intelligence. Future mentoring research could

explore gender differences in mentoring as the gender of the mentors was not specified in this study. Having a female mentor is often recommended, especially for developing female coaches (Bloom et al., 1998; Norman, 2012; 2014). Concerning intrapersonal knowledge and mentoring, future research could investigate how integrating intrapersonal knowledge within a structured or formalized mentoring program might improve coaching development.

Benefits and Implications of Intrapersonal Knowledge

Although the current results found that reflective practices enhanced a coach's effectiveness, the current results also suggested that developing intrapersonal knowledge could impact their own health and well-being. Coaching is a stressful high-pressure job, with high turnaround rates, several administrative demands, and high expectations (Davies, Bloom, & Salmela, 2005; Thelwell, Weston, Greenlees, & Nicholas, 2008a). Female coaches are especially at risk of burnout and low job satisfaction compared to male coaches due to the different demands they may face (Durand-Bush et al., 2012; Kelley, 1994). Developing self-awareness and identifying signs of stress that could lead to burnout become crucial for one's long-term health and well-being (Frey, 2007; Kelley, 1994). The following section will discuss some demands and stressors of coaching, some alarming consequences and symptoms of stress in coaching, and how intrapersonal knowledge overlaps with previously researched concepts that can be used to buffer some of these issues, such as self-regulation.

Demands and stressors. Coaches in the present study described some of the challenges and demands of a high-pressure coaching career, most notably with respect to both performance (i.e., pressure to win) and organizational (i.e., long hours) stressors (Davies et al., 2005; Thelwell, Wagstaff, Chapman, & Barker, 2016; Norris, Didymus, & Kaiseler, 2017). Performance stressors mentioned by the current sample of coaches included feelings of stress on

the sidelines, the daily pressure of excellence, and dealing with a tough loss. Organizational stressors included dealing with difficult athletes, academic struggles, long working hours, travelling, and recruiting. While the present study did not purposefully investigate gender issues, it is interesting that four of the six coaches raised challenges associated with being a female coach in a male dominated field. One such challenge was the feeling and pressure to constantly prove themselves in order to gain respect from male colleagues. This was especially true during coach licensing, where the coaches were often the only females and felt like they had to defend women. According to Kilty (2006), women coaches face external and internal barriers that interfere with female coaches' professional opportunities. One such barrier appearing in this study was assumption of having to "prove oneself" as a capable coach (Kilty, 2006). These kinds of barriers and challenges can often lead to additional pressures and stress on female coaches. Recently, the awareness and focus on improving opportunities for women in sports and women in coaching have increased, such as the "Women in Sport Initiative" at McGill University (Zukerman, 2018), and the "Own the Podium: Women in Coaching Initiative" across Canada ("Own the Podium", 2019). Yet more effort needs to be made to include male coaches in these initiatives as allies, and teach them about the gender-based barriers faced by female coaches and female athletes. This is especially important considering most of women's sports are coached by men (Kamphoff & Gill, 2013).

Additionally, the coaches in the present study felt responsible for dealing with their athletes' emotions, which, in turn, affected their own emotions. Previous research on the emotional nature of coaching is scarce, and has primarily focused on educational literature (Potrac, Jones, Purdy, Nelson, & Marshall, 2013). The present study builds on the importance of exploring the emotional implications in coaching (Potrac et al., 2013; van Kleef, Chesin, Koning,

& Wolf, 2019; Wagstaff et al., 2018), by illustrating the reciprocal nature of the relationship, which suggests athlete emotions and stress can impact the emotions and stress of a coach (Frey, 2007; Norris et al., 2017; Potrac et al., 2013). Studying how coaches learn to deal with their own emotions has important implications, given that emotional exhaustion is one of the main symptoms of burnout (Raedeke & Kenttä, 2013). Consequently, developing intrapersonal knowledge, through high self-awareness and high emotional intelligence, could help coaches self-assess their emotions and understand the impact they play on their athletes' emotions (Norris et al., 2017; van Kleef et al., 2019).

Symptoms and consequences. Three of the six coaches described being physically and mentally drained at some point in their careers, with one coach expressing feelings and symptoms of depression. These alarming findings reveal the severity coaching demands and stressors can reach when coaches do not have the proper coping resources (Wagstaff et al., 2018; Levy, Nicholls, Marchant, & Polman, 2009), including for female coaches (Durand-Bush et al., 2012). While the present study did not probe for any aspects of mental health or burnout, half of the participants shared these concerns. The casual manner the results were brought up illustrates the commonality of these symptoms in elite coaching, as well as the urgency of finding solutions (McNeill, Durand-Bush, & Lemyre, 2017; Roberts, Baker, Reeves, Jones, & Cronin, 2019). However, the openness with which coaches discussed these issues displays the diminishing stigma and shame concerning mental health in a high-performance job such as elite coaching.

The constant pressure of excellence associated with coaching an elite University program, day after day, year after year, was regularly expressed by the present participants. The fear of letting people down when 'excellence' is not met (i.e. losing a National Championship), can lead to serious mental health repercussions, such as depression and burnout (McNeill et al.,

2017; Norris et al., 2017; Roberts et al., 2019). Previous research exploring burnout have noted that burnout is a highly complex and individualized concept to understand (McNeill et al., 2017; Raedeke & Kenttä, 2013). Furthermore, Kelley (1994) found that feelings of being emotionally drained, frustrated, and fatigued were associated with female more than male coaches. The coaches in our study only became aware of their symptoms of stress after experiencing them for an extended amount of time (i.e. 10 years), and actually contributed to one of our participants quitting coaching. These findings suggest that becoming aware of symptoms of stress earlier could lessen incidences of burnout, since burnout is a reaction to chronic stress and occurs when workplace demands exceeds individuals' resources over an extended period of time (Raedeke & Kenttä, 2013). Some short-term solutions used to alleviate physical symptoms of headaches and acid reflux included regularly ingesting ibuprofen. However, this only temporarily addressed physical symptoms, and not the cause of the symptoms, which was chronic stress. These results are worrisome, and indicate the lack of awareness, lack of time, lack of priority, and especially lack of resources coaches have concerning their own health. Interestingly, reflection and lifelong learning represent self-regulatory and coping behaviours used in previous research to alleviate symptoms of stress and burnout (Durand-Bush et al., 2012; Raedeke & Kenntä, 2013). Durand-Bush and colleagues (2012) found that coaches' continued learning contributed to their self-regulation by enhancing their planning, self-efficacy, and self-control when resolving conflicts. Future research might explore the overlapping concepts of intrapersonal knowledge and self-regulation, such as reflection and lifelong learning, and demonstrates their potential use as coping strategies (Norris et al., 2017). The value of incorporating day to day intrapersonal knowledge concepts in coaching should not be limited to improving effectiveness, but should also be used to anticipate stressful experiences, and ultimately improve coaches' well-being.

However, teaching intrapersonal knowledge will not treat symptoms of burnout, nor prevent a burnout from happening. Thus, more resources must be made available to coaches, and more coaches must openly speak about their mental health struggles in order for a culture shift valuing sports coaches' health to occur.

Chapter 6

Summary

Coaching expertise research has commonly focused on years of experience and/or winning records, in spite of evidence suggesting more variables are at play in identifying and evaluating an expert coach (Côté & Gilbert, 2009). In fact, Côté and Gilbert specified coaching expertise as: "The consistent application of integrated, professional, interpersonal, and intrapersonal knowledge to improve athletes' competence, confidence, connection, and character in specific coaching contexts" (p. 316). Three underlying components shaped this definition: (a) athlete's outcome, (b) coaching contexts, and (c) coaches' knowledge (Côté & Gilbert, 2009); the current study focused on coaches' knowledge, which is comprised of professional, interpersonal, and intrapersonal components (Côté & Gilbert, 2009). Coach education programs usually focus on professional and interpersonal types of knowledge, somewhat overlooking how coaches acquire and develop their intrapersonal knowledge. Intrapersonal knowledge concerns the understanding of oneself (self-awareness) and the use of introspection (Côté & Gilbert, 2009). The purpose of this study was to gain insight into the development, application, and perceived benefits of intrapersonal knowledge in successful female university coaches.

Upon approval from the McGill Research Ethics Board, six successful female university women's team sport head coaches were interviewed for this qualitative study. Their combined experiences included an average of 19 years as university head coaches, 11 national championships, and 22 coach of the year awards. Furthermore, five of the six participants had obtained a level 3 and one a level 4 in the National Coaching Certification Program (NCCP). All of the coaches were highly educated outside of coaching as well. One coach had a bachelor's degree, four had a master's degree, and one had a PhD. The coaches were recognized for

emphasizing the development of accomplished individuals beyond athletics. These characteristics illustrate qualities of open-mindedness and emotional intelligence, which helped to ensure the participation of reflexive coaches.

The current qualitative study followed the collective case study methodology to answer the questions of "how" and "why" coaches developed and applied their intrapersonal knowledge (Sparkes & Smith, 2014). Semi-structured open-ended individual interviews were used to gather data in the form of purposeful conversations. These permit the researcher to collect the important information about the topic of interest while allowing the participants to openly discuss their own thoughts and feelings (Holloway, 1997; Sparkes & Smith, 2014). Interviews were transcribed verbatim then analyzed using thematic analysis. Thematic analysis identified themes in the dataset, and was used to describe and interpret the meaning and importance of these themes (Braun, Clarke, & Weate, 2016).

The current analysis revealed three higher order themes from the data: *coaching career and development, coaching environment and atmosphere,* and *personal growth and prosperity*. First, the theme *coaching career and development* included aspects that shaped a coach's career and coaching progress. Second, *coaching environment and atmosphere* involved the contextual and situational circumstances affecting the job of the coach, and thirdly *personal growth and prosperity* related to factors contributing to coaches' growth, happiness and well-being. Each of the three overarching themes will be explained in more detail in the following section.

Conclusions

Coaching Career and Development

- The coaches' personal background, particularly their athletic and academic achievements, influenced their professional careers by increasing their self-awareness and coaching knowledge.
- Their coaching style differed depending on the context of practice or a game, illustrating their heightened awareness of their actions and behaviours.
- Self-confidence and eliminating doubts was particularly valued by the coaches during important games, such as National Championships.
- Being a female coach in a male dominated profession impacted them, as many felt they had to prove themselves to their male counterparts during coach licencing.
- The women felt they had to defend their position and women's sport in general.

Coaching Environment and Atmosphere

- Coaches had to deal with a number of team factors and coaching challenges leading to regular reflections on topics like the recruiting process, or building and maintaining team culture.
- Coaches were aware of the importance of their interpersonal skills to handle multiple athlete factors, and how their own emotions were impacted by their athlete's emotions.
- The pressure of excellence was one of the most discussed challenges, and the weight of living up to those standards on a daily basis.
- The pressures and coaching challenges led to stress and symptoms of burnout for some.
- Coaches explained feelings of physical and mental exhaustion.

- Being aware of these stressors was important and finding different strategies to cope with these were crucial, such as learning to let go at the end of the day, and finding things to do outside of coaching.

Personal Growth and Prosperity

- Coaches valued continuous learning as a way to grow and self-improve.
- Reflections took place consistently throughout the season and were considered an important process for problem-solving and growth.
- The depth and frequency of the reflections fluctuated depending on the time of the season. Stressful parts of the season, such as playoffs, were less focused on self-reflections and more focused on the task at hand.
- Over reflection was seen as a crutch to coaching, constantly reflecting could lead to rumination, and eventually block the decision-making process.
- The most meaningful source of knowledge for coaches was learning from a mentor.
- Mentors were used for sport-specific knowledge, but also went further into organizational knowledge, and developing personal skills such as emotional intelligence.
- The coaches valued learning from people other than their mentors, such as graduate school supervisors, other faculty members at their university, or other sport coaching colleagues.
- Coaches discussed reasons for remaining in coaching, such as having a healthy work-life balance, and disconnecting from the day.
- Coaches found their careers to be personally gratifying by witnessing their athletes mature and grow over the years.

- Winning was seen as validation for the programs, and rewarding for the hard work put in, but coaches were aware of not using winning for personal validation; ultimately growth and happiness were most important.

Theoretical and Practical Applications

While research on coaching expertise has recognized intrapersonal knowledge as a key component of the definition (Côté & Gilbert, 2009; Gilbert & Côté, 2014), the current study is amongst the first to explore intrapersonal knowledge as the main focus. The results from this study add to intrapersonal knowledge research, which has traditionally focused on reflection.

The findings suggested that growth occurred through daily reflections. Previous research has focused on reflection as a means to develop coaching effectiveness (Gilbert & Trudel, 2015; Taylor, Werthner, Culver, & Callary, 2015; Gallimore, Gilbert, & Nater, 2013). In fact, there are three levels of reflection: (1) technical, (2) practical, and (3) critical reflections (Knowles, Tyler, Gilbourne, & Eubank, 2006). (1) Technical refers to concerns with standards, competence, and mechanical aspects of practice, for example evaluating one's offensive strategies. (2) Practical refers to coaches exploring personal meaning; for example, exploring the nature and quality of the coach-athlete relationship, and evaluating one's actions within that context. (3) Critical reflections involve concerns with examining the larger social, political, and economic factors and how those impact coaching behaviours. Previous research by Knowles et al. (2006) on the reflective practices of graduated students from the Liverpool John Moores University Coaching Science degree found no evidence of those coaches reflecting at a practical or critical level. The coaches in the present study engaged in all three levels of reflection. Additionally, unique to this study, excessive self-reflection was considered a barrier to decision making. Illustrating the

importance of teaching self-reflection skills, and developing intrapersonal knowledge, rather than allowing random unstructured reflections.

Furthermore, the current study can be utilized by coach education and development organizations such as the NCCP. In fact, this research suggests there might be gender differences to coaches' intrapersonal knowledge. The female coaches were aware of the larger sociocultural pressures at play, and the resistance they may face working in a male dominated sport environment. Indeed, many felt they had to defend themselves, their head coaching positions, and women's sport in general, especially during coaching licensing. However, the coaches in the present research expressed the importance of self-confidence in their abilities. The underrepresentation and status of women in coaching is well researched, especially from a feminist perspective (Kelley, 1994; Kilty 2006; Norman, 2012, 2014). The present study did not adopt a feminist perspective, or probe for any gender biased conversation. Yet, the topic surfaced naturally, suggesting sexism remains an issue in certain sport cultures (Kamphoff & Gill, 2013). Therefore, NCCP curriculums should consciously make an effort of utilizing a female coach perspective during licensing, and at the same time sensitize male coaches to the barriers female coaches often face.

Limitations and Recommendations

While the current study provided insight into intrapersonal knowledge and broadened coaching expertise research, several limitations are to be considered. First, participants were exclusively U Sports coaches. Thus, findings may only apply to Canadian University coaches, and only within soccer, basketball, and volleyball sports. Indeed, the results may not be as applicable in other sporting contexts such as youth or professional levels. Second, only female coaches were interviewed. This study suggests there are some gender differences to consider

when studying intrapersonal knowledge, therefore some of the findings may not be applicable to male coaches. Observing intrapersonal knowledge in male coaches would further our understanding of this topic. Third, the recruitment criteria demanded at least 5 years of experience as a University head coach, and our sample averaged a little over 19 years. Thus, results may not be applicable to less experienced University coaches. Furthermore, the range of years of experience was relatively wide, between seven and twenty-eight years of coaching experience. The present study did not examine differences in intrapersonal knowledge relative to years of experience. However, previous research suggests experience is an important factor in coaching expertise (Donoso-Morales, Bloom, & Caron, 2017). Future research could consider comparing reflexivity in coaches' relative to their years of experience. Fourth, the results were limited to the perspectives of head coaches and thus do not represent the perspectives of assistant coaches. Broadening perspectives to explore the entire team's coaching staff' intrapersonal knowledge could help to improve our understanding of the subject. Fifth, intrapersonal knowledge concerns the understanding of oneself through introspection and self-awareness. Some of the coaches could therefore be naturally more self-aware, or reflexive. Future research could attempt to look at trait versus state components of intrapersonal knowledge, to determine whether expert coaches are naturally more introspective or have they developed it over time with experience.

Some practical recommendations are to be considered for future research. For instance, the present results illustrated the ongoing barriers female coaches may experience during coaching licensing. Bringing awareness to both male and female coaches concerning the historical and broader sociocultural context leading to sexism in sport during these licensing could help decrease these incidences. This could help female coaches understand the importance

of developing self-confidence when faced with these situations, but also develop and gain male allies by educating men of the barriers faced by women leaders in their sport. This would be beneficial for women's sport in general, being that most women's sport teams are coached by men. Furthermore, intrapersonal knowledge could be fostered through developing a female mentoring program for young aspiring female coaches to work with successful female leaders and use them as role models. This could help promote the development, lower the turnover rate, and increase job satisfaction of female coaches. Although it was not the focus of the study, the present research shed additional light on the stressors and demands coaches regularly face. Some intriguing findings concerned the overlap between intrapersonal techniques and previous coping and self-regulation research, such as self-reflection, and social support from mentors (Durand-Bush, Collins, & McNeill, 2012). Therefore, future research could further investigate the versatility of intrapersonal knowledge, beyond coaching effectiveness. Indeed, developing intrapersonal knowledge and self-awareness in a day-to-day practice could help buffer some of the eventual symptoms of burnout. Becoming aware of one's stressors could be preventative and help coaches understand when it is time to make changes for their own health and wellness.

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Appendix A

Recruitment Script

Dear _____,

My name is Kathleen Bélanger-Finn, I am currently a first year Master's student in sport psychology under the supervision of Dr. Gordon A. Bloom at McGill University. Based on your exemplary coaching credentials and high level of experience as a university head coach, we are contacting you to invite you to participate in our research project on how coaches develop, practice, and benefit from their coaching knowledge.

The McGill University Ethics Board has reviewed and accepted this study for its adherence to ethical guidelines. Any information you provide during this study will remain confidential. If you choose to participate, I will conduct a 1-2 hour interview with you at a time and location of your choosing. If more information is required, then a follow-up telephone conversation may occur.

Should you have any questions concerning this study, please contact my supervisor or myself using the information provided at the bottom of the page. The McGill Sport Psychology Research Laboratory has a history of producing influential research on sport coaching and leadership. Please visit our website if you would like to learn more about our research: http://sportpsych.mcgill.ca.

Thank you for considering participating in this research project, and I look forward to hearing from you.

Sincerely,

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Appendix B

Informed Consent Form

This study is in partial fulfillment of the requirements for the degree of Master of Arts for Kathleen Bélanger-Finn, a graduate student in sport psychology in the Department of Kinesiology and Physical Education at McGill University. We would like to invite you to participate in our study titled, "Understanding the intrapersonal knowledge of successful Canadian University coaches". If you choose to participate in this study you will be requested, without payment, to partake in a 1-2 hour audiotaped interview where you will be asked to discuss your experience with how you developed and practice your coaching knowledge and reflective practices. If more information is necessary, then a follow-up telephone interview may occur.

At the end of the interview you will have the opportunity to clarify or edit any comments you made. You will also receive a typed transcript of the interview, which may be edited at your discretion. Prior to publication, you will receive copies of the results and conclusions of the study. Any and all information you provide throughout the study will **remain confidential**. Only the principle investigator, Kathleen Bélanger-Finn, and the faculty supervisor, Dr. Gordon A. Bloom, will have access to identifiable data. All audio files and the digital copies of interview transcripts will be securely stored in encrypted folders on a password-protected computer for a period of seven years. Any paper copies of notes will be converted to digital files. After ensuring they were converted accurately, the paper copies will be destroyed. Seven years after the study ends all the data will be destroyed. The information will be used for publication purposes and scholarly journals or for presentations at conferences. Your name and identity will not be revealed at any time. The McGill Research Ethics Board has reviewed this study for compliance with its ethical standards. **Your participation in this study is voluntary and not mandatory. You are free to refuse to answer any questions or withdraw from participation at any time, for any reason without penalty or prejudice.**

After reading the above statement and having had the directions verbally explained, it is now possible for you to provide consent and voluntarily agree to participate in this research project based on the terms outlined in this consent form. You will be provided with a signed copy of this consent form for your records. Please contact the Research Ethics Officer at 514-398-6831, or Lynda.mcneil@mcgill.ca, if you have any questions or concerned regarding your rights and welfare as a participant in this research study. Please sign below if you agree to participate in this study.

I agree to the audio-taping of the interviews with the understanding that these recordings will be used solely for the purpose of transcribing these sessions. Yes □ No □

_____ _____

Signature Date

_____ _____

Researcher's Signature Date

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Appendix C

Interview Guide

Pre-Interview Routine

- Introduction of researcher
- Overview of the study

Opening Questions

1. Briefly tell me about your athletic career.
2. Briefly summarize your coaching career.
3. Could you explain some of the reasons you started, and have remained coaching, for such a long period of time?

Main and Follow-Up Questions

4. Could you describe a few of the most memorable coach learning experiences or moments throughout your career?
5. Thinking back on your career, could you name the most influential person(s) and explain why this person was so influential?
6. What are some of the ways you have reflected on your coaching career, as well as how often and when did/do you engage in reflections/re-evaluations?
7. Describe times when you have requested and used some external feedback from assistant coaches or players. Has your approach changed over the years?
8. Could you describe a significant life event, outside of coaching, that might have impacted or influenced your coaching career?
9. Could you explain how a significant loss or a setback in your coaching career might have led you to reflect, re-evaluate, and change your coaching practices?
10. What are some barriers to introspection for you? (Time, pressure of winning, deemed not important, family)

Summary and Concluding Questions

11. Is there something that we didn't cover in the interview that you would you like to add?

12. Do you have any final comments or questions?

Probes: Key phrases to stimulate reflection

- Can you expand on that?
- Can you clarify that?
- That's interesting, tell me more about that?
- Could you please tell me more about this?

Table 1. Participants' Demographic Information

	Sport	Highest playing level as an athlete	Years of University head coaching experience	Provincial/National team coaching experience	Highest level of NCCP	Highest level of education	National Championships
C1	Volleyball	National Team	28	Assistant coach of provincial team	Level 3	Master's in physical education and physical conditioning	-
C2	Basketball	National Team; WNBA	7	Head coach provincial team; Assistant coach Junior National team	Level 3	PhD in Sport Psychology	-
C3	Basketball	CEGEP	13	Head coach provincial team; Assistant coach Junior National team	Level 3	Master's in Sport Psychology	5
C4	Soccer	National Team	10	Head coach provincial team; Assistant coach Junior National team	Level 3	Bachelor's in Physical Education	-
C5	Basketball	National Team	24	Co-head coach Universiade team; Junior National team assistant coach	Level 3	Master's in audiology and speech-language pathology	3
C6	Soccer	National Team	33	Head coach provincial team; Assistant coach Junior National team	Level 4	Master's in coaching	3

Table 2. Codes, lower-order themes, and higher-order themes from data analysis

Codes	Lower-order Themes	Higher-order Themes
1. Athletic career 2. Coaching certification 3. Coaching evolution 4. Coaching longevity 5. University education	1. Personal background (57) – Personal experiences and factors that shape and influence a coach's career	Coaching Career and Development (128) – Aspects that shape a coach's career and coaching progress
1. Being a female coach 2. Coach self-confidence 3. Coaching style 4. Planning 5. Relaxation techniques	2. Coach characteristics and behaviours (71) – Attributes and behaviours of a coach	
1. Athlete academics 2. Athlete accountability 3. Athlete emotions 4. Coach-athlete relationship	1. Athlete factors (32) – Aspect of an athlete's life that coaches must deal with and manage	
1. Team communication 2. Team culture 3. Team dynamics 4. Recruiting	2. Team factors (30) – Aspects and responsibilities relating to the structure of the team	Coaching Environment and Atmosphere (164) – Contextual and situational circumstances that affect the job of the coach

1. Athlete problem – on 2. Athlete problem – off 3. Memorable coaching moment – negative 4. Self-evaluation – negative 5. Pressure of excellence 6. Emotional demands	3. Coaching challenges (102) – Pressures and demands coaches deal with as part of their job	
1. Reflection – Timing 2. Journal writing 3. Books 4. Lifelong learning 5. Barriers to reflection 6. Self-improvement	1. Quest for learning (70) – Techniques to seek knowledge and growth	
1. Athlete feedback 2. Mentor 3. Non-mentor learning 4. Outside feedback 5. Social support	2. Developmental agents (66) – The people who play an active role in advancing a coach's career by providing developmental assistance	Personal Growth and Prosperity (181) – Factors contributing to coaches' growth, happiness and well-being
1. Athlete appreciation 2. Memorable coaching moment 3. Coaching rewards 4. Work-life balance 5. Family life	3. Coaching gratification (45) – Experiences and factors which make coaching worthwhile and rewarding	