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## “Can I use the services?”: Coaches’ Use of Sport Psychology for Their Own Development and Performance

Tammy L Sheehy

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**“Can I use the services?”: Coaches’ Use of Sport Psychology for  
Their Own Development and Performance**

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**Dissertation submitted to the College of Physical Activity and  
Sport Sciences at West Virginia University**

**in partial fulfillment of the requirements for the degree of**

**Doctor of Philosophy  
in  
Sport, Exercise, and Performance Psychology**

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## ABSTRACT

### “Can I use the services?”: Coaches’ Use of Sport Psychology for Their Own Development and Performance

Tammy L. Sheehy

As a helping profession, sport psychology consulting services are offered to any who wish to enhance their performance, holistic well-being, and social functioning (AASP, n.d.). Though the current literature on experiences of use are heavily rooted in athlete experiences, there is an increasing recognition of the coach as a performer in their own right as well (Thewell, Weston, Greenlees, & Hutchings, 2008). Much like their athletes, coaches face organizational, competitive, and personal stressors in the sporting environment (Olusoga, Maynard, Butt, & Hays, 2010), especially in the high performance context. Therefore, this study examined the experiences of eight high performance coaches from a range of sports who have utilized sport psychology services for their own performance enhancement as a coach. This study was conducted using a hermeneutic phenomenological methodology and each participant engaged in two semi-structured interviews. Thematic analysis of the data elicited a number of themes related to the research questions. Impetus themes included *buy-in*, *opportunity*, and *environmental stressors*. Benefits coaches felt they received were under two broad dimensions – intrapersonal and interpersonal. Intrapersonal had two higher-order themes – *facilitating introspection* and *performance enhancement*. The interpersonal dimension had three higher-order themes, these were *navigate media interactions*, *enhance communication with athletes*, and *friendship development*. Barriers themes included *lack of resources*, *stigma*, *SPC characteristics*, and *coach characteristics*. This research gives the field of applied sport psychology insight into how SPCs and high performance coaches work together in support of the coach’s performance and professional development. Future research should extend this line of research by examining high performance coaches in more diverse countries and cultures to determine if and how sport psychology services may be useful within different contexts. Additionally, further examination of preferences shown in this research, as well as a focus specifically on female coaches, will be helpful in understanding the nuances of working with and supporting different coaches’ performance and professional development.

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*“The delicate balance of mentoring someone is not creating them in your own image, but giving them the opportunity to create themselves.”* – Steven Spielberg

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## Introduction

Over the past two decades, the field of sport psychology has grown exponentially (Gee, 2010) and is continuing to develop internationally. With this growth, research and applied work by sport psychology practitioners has become more widespread and the services have expanded from delivery only to athletes (Longshore & Sachs, 2015) to working with others who may be deemed performers both inside and outside of the sporting world. While this expanded network of clientele for sport psychology consultants has led to greater depth of literature with other performing professions (e.g., dance, music), there is a lack of literature specifically examining the sport coach as a client and performer in their own right. This paucity of research within sport psychology is in contrast with the view of coaches as performers who are expected to continually develop their craft and who deserve ongoing support (Rynne, Mallett, & Rabjohns, 2017).

Within the field of applied sport psychology, sport psychology consultants (SPCs) help their clients to enhance the process of performance, holistic well-being, and social functioning (AASP, 2016). Though coaches are discussed as a client recipient in a number of sport psychology organizations, internationally (e.g., AASP, BASES, FEPSAC), the focus for the majority of applied sport psychology interventions is on the coach's role as a facilitator of sport psychology skills with athletes, rather than focusing on their own performance and well-being (Longshore & Sachs, 2015; Pope & Hall, 2015). Furthermore, coaches, themselves, often direct their focus predominantly outwards towards their athletes' performance, rather than inwardly on their own (e.g., Weinberg, Butt, & Knight, 2001). There may be many reasons for this direction of focus. Possibly the most obvious reason is that coaches are traditionally evaluated based on their athletes' performance

(Rynne et al., 2017) and the importance of producing successfully performing athletes has become a paramount goal in most sport organizations.

With this increasing arms race towards sporting success, the expectations of those who train the athletes is growing and changing as well. Further, the nuanced and complex practices of coaches which change within different contexts and are often described as chaotic and ever-evolving, are becoming increasingly recognized (Rynne et al., 2017). As such, the field of coaching is moving to establish itself as a profession with specialized competencies, though this progression is more advanced in some countries compared to others (Mallet & Lara-Bercial, 2016). This push for professionalization has reinforced the facilitator role of the coach but it has also initiated recognition of a coach's needs for professional development to perform optimally (Mallett, Rynne, & Dickens, 2013). These advancements have been most notable in the establishment of international coaching organizations dedicated to the enhancement of quality coach education programs, increasing demand for certification, and developing frameworks to guide coaching competence and effectiveness in a number of different countries and contexts (e.g., the International Sport Coaching Framework (ISCF) V1.2; ICCE, 2013). Examples of the types of competencies needed for the quality profession of practice in coaching are interpersonal (e.g., coach-athlete communication) and intrapersonal (e.g., reflective practice) skills which are often underemphasized in current coach education programs (Maclean & Lorimer, 2016).

While there is a push for the professionalization and development of greater support for coaching, the reality of the current coaching climate remains one of scarce support and ever-increasing stressors. This dynamic or "volatile" climate (Hill & Sotiriadou, 2016) is most evident in the high performance context which requires one to develop evidence-based and systematic performance programs, exhibit a high level of commitment and interaction with athletes, engage



in highly formalized competition structures, and to complete these tasks within specific contextual constraints (Rynne et al., 2017). Such constraints, which may offer challenges to success, include a lack of adequate resources, increased international competition, and the importance placed on success relative to the country's investment in high performance sport (Mallett & Lara-Bercial, 2016). These authors subsequently identify a number of stressors experienced by coaches when performance expectations are not met, the most prominent being loss of employment.

High performance coaches manage a number of roles through physical, technical, and psychological challenges (Thelwell, Weston, Greenlees & Hutchings, 2008). During this process, coaches face many of the same stressors that their athletes face in the sporting environment, including coping with stress (Didymus, 2017), job insecurity (Wagstaff, Gilmore & Thelwell, 2015), managing personal recovery (Thelwell et al., 2008), long working hours (Knight, Reade, Selzler, & Rodgers, 2013), time and resource constraints, and public pressure to perform (Altfeld, Mallett & Kellman, 2015). Though many acknowledge these concerns for coaches, the role that applied sport psychology could play in helping to address them through development of different intrapersonal and interpersonal skills has only recently been examined in the literature. For example, recent studies have aimed at identifying and helping coaches cope with stressors (e.g., Olusoga, Butt, Hays, & Maynard, 2009), exhaustion (e.g., Bentzen, Lemyre, & Kentta, 2016a), burnout (e.g., Bentzen, Lemyre, & Kentta, 2016b), and need satisfaction (Allen & Shaw, 2009) in high performance contexts. Thelwell et al. (2008) found that high performance coaches already use psychological skills (self-talk, imagery, relaxation, and goal setting) to enhance their coaching performance, and thus this population may be open to similar interventions used with

athletes. Additionally, Giges and colleagues (2004) have advocated for recognition of the coach as a performer in their own right and in need of individualized support services.

At least two intervention studies have also been conducted to help coaches learn skills to moderate their stressors as coaches in an effort to enhance performance. The first study conducted by Olusoga, Maynard, Butt and Hays (2014) was a six week mental skills training (MST) intervention with five pre-elite coaches from the United Kingdom. The results of this intervention indicated that these coaches had an overall more positive perception of their ability to coach effectively while under pressure and showed significantly improved ability to relax during competition, decreases in somatic anxiety, and positive changes in self-confidence. Qualitatively, these coaches expressed that taking part in the program improved their coaching performance by giving them techniques to stay in the moment, keep focused, and be positive.

The second study examined the effects of an exploratory, mixed-method mindfulness intervention with 20 US Division I collegiate coaches (Longshore & Sachs, 2015). Results showed that coaches who received the six-week intervention significantly improved their emotional stability and had significantly decreased anxiety (as measured by repeated-measures ANOVA) pre- to post-intervention. Additionally, coaches qualitatively reported greater self-awareness that positively impacted their coaching performance (e.g., through increasing focus and controlling emotions) and positively impacted their interactions with athletes. This literature is a promising direction highlighting the ways that sport psychology skills may be useful for elite coaches' performance enhancement through development of intrapersonal knowledge. However, neither of these interventions were delivered in the context of the active coaching environment and the skills developed were chosen by the research teams, rather than the coaches themselves. Therefore, a greater depth of literature is needed to better understand how high performance

coaches choose to use sport psychology services within their practical coaching environment (i.e., which skills or stressors they may wish to address, and in what ways they would like their performance to improve).

There is also a paucity of research examining the motivation and attitudes of coaches for utilizing a sport psychology consultant (SPC). Factors that have been identified to positively influence a coach's attitude towards utilization of a SPC with their athletes include coach demographic factors (i.e., older age, more years of coaching experience, higher level of education; Zakrajsek, et al., 2011; and being female; Wrisberg, Loberg, Simpson, Withycombe, & Reed, 2010), and the abilities of SPCs themselves (i.e., ability to build a trusting relationship, fit in with the team, maintain professional boundaries, and work within the coach's own system; Zakrajsek, et al., 2013). Martin, Zakrajsek, and Wrisberg, (2012) also indicated that the most consistent and influential factor contributing to confidence in using SPCs is a coach's previous knowledge and experience with sport psychology. Through increased knowledge of sport psychology, coaches have begun to realize and value ways that sport psychology services could be useful for their own needs as a coach.

Coaches value ways in which a SPC could help improve their interactive skills and build effective coach-athlete relationships (Barker & Winter, 2014). One novel study even showed how two elite coaches developed a consulting relationship with their respective team SPC for their own performance (Sharp & Hodge, 2013). These authors noted that the positive perceptions that the coaches developed of the SPCs' work with their athletes led them to expand the role of the SPC to working with them on their own coaching needs and performance. While the specific motivation for beginning this work was unclear aside from a comment that coaches "perceived potential benefits for their coaching" (p. 317), the development of increased trust between the

coaches and SPCs seemed to be an important factor that contributed to the development of their consulting relationships. The development of a secondary consulting relationship between the coach and the team SPC for the coach's own performance is an interesting concept as it may be a way that coaches maintain their commitment to their athletes' performance development while also allowing them the opportunity to enhance their own performance. While this may be one pathway to engaging in performance enhancement as a coach, further research is needed that examines the different ways through which coaches come to work with a SPC on their own performance needs.

Though coaches' views of sport psychology services are generally positive, some barriers have been identified that make utilizing sport psychology services more difficult. These include the negative connotation of psychology (Van Raalte, Brewer, Matheson, & Brewer, 1996), lack of sport psychology knowledge (Barker & Winter, 2014; Pain & Harwood, 2004), accessibility (Barker & Winter, 2014), lack of resources and funding (Pain & Harwood, 2004), time constraints (Gould, Medbery, Damarjian & Lauer, 1999) and the prevailing culture within the sport they coach (i.e., contact sports which promote masculinity and undermine help-seeking behavior; Steinfeldt & Steinfeldt, 2012). These barriers have all been identified in research examining coaches' use of sport psychology with their athletes in different contexts, however, many of the same factors may be barriers to high performance coaches utilizing sport psychology services for their own performance as well.

There is a need for the field of applied sport psychology to collaborate with coaches to advance knowledge of the capacity in which a SPC can be utilized to help coaches with their own performance. Therefore, the purpose of this study was to examine the perceptions and experiences of high performance coaches who are currently, or have recently, worked with a

SPC to enhance their performance. Coaches in a high performance context were pertinent to this study as the elite sport environment is differentiated from other contexts of competitive involvement due to unique high pressure situations and stressors (Didymus, 2017) in which sport psychology services may be able to provide appropriate and adaptive skill acquisition for optimal performance. The broad research question for this study is: What are high performance (HP) coaches' experiences of working with a SPC for development of their own performance? Sub-questions under this broad umbrella are: 1) What do HP coaches perceive to be the impetus for engaging in performance enhancement with a SPC? 2) What do HP coaches perceive as the benefits of working with a SPC? 3) What barriers do HP coaches perceive for engaging in work with a SPC for their own performance?

## **Methods**

### **Methodology**

This study was framed in a hermeneutic phenomenological lens and based in a constructivist paradigm. The ultimate aim of hermeneutic phenomenology is “to describe, understand, and interpret participants' experiences” (Tuohy, Cooney, Dowling, Murphy, & Sixmith, 2013, p.18). This lens fits well within a constructivist paradigm which entails a relativist ontology, emphasizing that realities are multiple, socially and experientially based, intangible mental constructions that are dependent on individual people (or groups) for meaning (Charmaz, 2014). Epistemologically, constructivism is transactional and subjectivist, meaning that the research is constructed by the researcher and participants through social interaction with each other (Charmaz, 2014). Within this research, each participant was recognized as having unique individual realities based in their own experiences and social interactions, and that they were the experts in their own experiences. To elicit the individual constructions of participants

there needed to be interaction between the researcher and participants and interpretation of these constructions was through a hermeneutic process and a dialectical interchange (Laverly, 2003).

The research process was a collaborative construction between the researcher and the participants who expressed their personal experiences through a qualitative interview process.

Through dialogue together, the researcher and participants elicited construction of their experience and meaning by engaging in the hermeneutic process.

### **Participants**

The inclusion criteria for this study included high performance coaches who had experience using a sport psychology consultant to help improve their own performance as a coach for at least 3 months. The three month time frame has been used as a requirement in a previous coach-SPC relationship study (e.g., Sharp & Hodge, 2013). High performance coaches were defined as coaches whose primary source of income was through coaching athletes who compete in national and international competitions (including Olympic and non-Olympic sports, and professional sports; Sotiriadou & De Bosscher, 2018). A total of eight (female  $n=2$ ; male  $n=6$ ) high performance coaches were recruited for this study, two of which were no longer coaching. Participants coached a variety of sports (football (soccer)  $n=1$ ; golf  $n=3$ ; netball  $n=1$ ; rowing  $n=1$ ; wheelchair basketball  $n=1$ ; UFC  $n=1$ ) and came from a variety of countries (Australia  $n=1$ , Canada  $n=3$ ; Ireland  $n=1$ , Mexico  $n=1$ , New Zealand  $n=1$ , United States  $n=1$ ). A majority of these coaches were Caucasian (80%) with one African American and one Hispanic coach. The age of coaches ranged from 35 to 55 ( $M = 45.25$ ) and these coaches had an average of 20.38 years coaching in the high performance environment (range: 14-30 years). Additionally, coaches had engaged in work with a SPC on their own performance ranging from three months to 14 years ( $M = 6.5$  years) through multiple methods of contact including in-person, emails,

phone calls, and texting. The level of contact with SPCs varied and ranged from multiple times a week to once or twice a month and was dependent on the point in the season (e.g., during training camps SPC would be present in person more often). It is also important to mention that the wheelchair basketball coach and one of the golf coaches shared the same SPC, while the other two golf coaches shared a different SPC. Essentially, while there were eight coaches in this study, their experiences reflect work with only six different SPCs (see Table 1 for further participant demographic information).

### **Procedures and Data Analyses**

Following institutional review board approval, the researcher utilized a snowball sampling method to recruit participants. This process was conducted through a number of different forums including sending a study purpose and recruitment email to the sport psychology listserv (Sportpsy), networking with sport psychology consultants and coaches at the annual 2017 Association for Applied Sport Psychology conference, and sending recruitment emails, LinkedIn messages, and Facebook messages to sport organizations, sport psychology professionals, and high-performance coaches in different countries. The researcher followed-up with any professionals or coaches who responded to these recruitment methods. Once initial contact was made with coaches who agreed to participate, the researcher sent an email that contained a short demographic survey for the coaches to complete and an initial interview time was set up. The researcher contacted potential participants a maximum of three times to inquire about participation in the study. The researcher sent approximately 70 recruitment messages through email, LinkedIn mail, Facebook messenger, and WhatsApp. Thirty-three messages were sent to SPCs, 19 messages were sent directly to coaches, 6 messages were sent to the head of a sport organization, and 10 messages were sent to academic professionals. Participants were recruited

primarily through referral from SPCs ( $n=5$ ) and through another coach participant ( $n=2$ ). One participant was recruited through an academic professional. The process to successfully recruit eight participants (i.e., to complete the initial interview) took a total of 75 days.

A waiver of the requirement to obtain written documentation of the consent process was requested from IRB to allow for ease of consent for participants at a distance. In place of written consent, participants provided verbal consent prior to recording and reiterated their consent on the recording prior to the interview. Participants engaged in semi-structured interviews individually to encourage open and honest discussion of their experiences and perceptions. A semi-structured interview guide (see Appendix D) was developed and contained three main sections that aligned with the research questions – impetus for engaging in personal SP services, perception of performance needs, and barriers to engaging in personal SP services. The semi-structured interview guide was evaluated in a pilot interview with a high performance coach (who was not a participant in this study). The pilot interview was used to elicit feedback from a current high performance coach on the types of questions asked, understanding of what was asked, and appropriateness of the wording of questions for coaches. The semi-structured interview guide was altered in accordance with the coach's feedback. The updated guide was used to guide the first interview with each participant, however, participants were also encouraged to elaborate on their experiences and perceptions as they saw fit.

Initial interviews ranged from 35-79 minutes ( $M = 55$ ) in length and were completed through GoToMeeting which is a secure online software for video calling. One coach did not speak fluent English and the interview was conducted through a research assistant who was a native speaker and was able to interpret during the interview. This research assistant translated and transcribed that coach's interviews. All other interviews were transcribed verbatim using an



online transcription service (GoTranscript) and transcriptions were cross-checked by the lead researcher to ensure accuracy.

A research team consisting of the lead researcher and two research assistants trained in qualitative methods were involved in the analysis process. Braun and Clark's (2006) step-by-step process for thematic analysis were followed using an inductive approach to data analysis. The first phase is becoming familiarized with the data and involves multiple readings of each participant's transcription. In alignment with Braun and Clark's (2006) recommendation, the lead researcher and research assistants read through the entire data set once before beginning any coding of the data. The research team then read through the complete data set a second time and engaged in analytic memoing of their thoughts, reactions, and questions related to the participants' dialogued experiences.

The second phase in thematic analysis is generating initial codes (Braun & Clark, 2006). The research team read through each transcript again and coded words, phrases, or meanings that appeared interesting and important to participants' experiences. The hermeneutic circle process, which involves a cycle of understanding the individual parts contextually by referencing and acknowledging the whole text and integrating these together (Rapport & Wainwright, 2006), was important in the initial coding process. The research team met once during this phase of analysis to compare coding and ensure consistency in coding style. All team members also took notes of possible themes that they were noticing as they went through each transcript.

After all eight coaches' transcripts were coded by each research team member, the research team met to conduct phase three of the analysis process which is searching for themes (Braun & Clark, 2006). The research team held a workshop to search for and discuss themes. Codes were analyzed and various codes were combined to form overarching themes, while other codes

became their own theme. These themes were reviewed as part of phase four and then defined and named themes as part of phase five of thematic analysis (Braun & Clark, 2006). The research team split themes into sub-themes, where appropriate, related to the research questions and defined each theme by describing the essence of what each theme was about (Braun & Clark, 2006). Once this process was complete, a follow-up interview was set up with each participant. An individualized interview guide was created for each participant containing follow-up questions that were based on their initial interview as well as their own themes related to each research question. All participants were also given the themes elicited from the initial interviews of other participants and asked about their resonance or perception of those themes. The aim of the second interview was used to gain greater insights into coaches' experiences, and elicit perceptions that may have differed between coaches.

The follow-up interviews were an average of 33 days following the initial interviews and took an average of 43 minutes (range: 32-66) to complete. These interviews were transcribed and coded using the same process that was used to code the initial interviews. Themes were reevaluated and adjusted based on the follow-up interview codes and then organized into higher order themes pertaining to the research questions. This final step in analysis represents the latent level of thematic analysis which lead to examination of the underlying assumptions, conceptualizations, and ideas that shaped the semantic content of the data (i.e., the initial inductive codes; Braun & Clark, 2006).

### **Trustworthiness**

The researcher used many methods to establish trustworthiness. First, analytic memos were kept throughout the data collection and analysis process to continue to recognize and acknowledge where the researcher's own influences and beliefs were present. Another method to

establish trustworthiness was to have a research team consisting of two colleagues who have been trained in thematic coding. Establishing a research team was also another step that allowed the main researcher to recognize and challenge where and how their own perceptions may have been influencing the analysis and interpretations of the data. Through multiple coding, the research team deepened the understanding of the data and explored differences that helped to enrich the content of each code by coming to a consensus through collaboration (Sweeney, Greenwood, Williams, Wykes, & Rose, 2013). The final method used to establish trustworthiness was member checking with participants to further allow collaboration past the initial interview. This process was conducted during a follow-up interview with each participant to help ensure that participants felt understood and that their individual themes aligned with their own perceptions of their experiences (Thomas & Magilvy, 2011).

## Results

The findings of this study revealed a total of twelve themes related to the research questions. The themes are described below, separated by each research question where the higher-order themes are bolded and lower-order themes are italicized (see Table 2 for additional descriptions and quotes). Quotes are notated with participants' initials in parentheses to maintain anonymity.

### **Impetus For Engagement in Sport Psychology Services**

The following three higher-order themes of **buy-in**, **opportunity**, and **environmental stressors** are reflective of the reasons and ways that coaches became engaged in using a SPC for their own personal needs and performance enhancement.

**Buy in** was reflected by coaches' confidence in the effectiveness of sport psychology. All coaches emphasized a level of confidence with the sport psychology consultant that they worked with based on different influences including *experience with sport psychology prior to the SPC they worked with*. All coaches in this study had some type of previous experience with sport psychology prior to working with the SPC they used to help with their own performance. Experiences included reading sport psychology literature and studies, attending coaching workshops or seminars where sport psychology was discussed – “I was taking a coaching course in Canada...[SPC] offered a good portion of that course, uh, from, uh, the sport psychology mental preparation side of things” (BJ), or working with a consultant as an athlete. For the majority coaches, a combination of these experiences influenced their buy in.

Confidence in the effectiveness of sport psychology was also influenced by *development of the relationship with SPC* prior to engaging in their own work with them. The majority of coaches did not immediately engage in work with the SPC for their own performance but grew in their confidence of the effectiveness of their SPC's work through seeing positive team outcomes which made it easier for them to open up to using the SPC for their own performance. One coach indicated, “When I can see how the other players, how the players and the girls are interacting with this coach [SPC] and they have that-they have that safe space and that trust, then that would make it even better and easier for me” (AC).

For this majority of coaches, seeing positive work with the team led to an increase in building trust with the SPC as they felt confident that the SPC was committed to helping their team. One coach noted: “I gave her more and more of my trust as we went along... She had such a strong influence on my team. She could really...make or break us any time and I trusted that she would make us” (BJ).

Over a period ranging from months to years, coaches' relationships with their SPC's grew to the point where they felt they could "talk about anything." For example, one coach explained that their "personal and professional relationship kinda...evolved to where we can readily discuss or talk about...anything" (GJ).

**Opportunity** was conceptualized as the prospect of using an available resource to improve performance. A majority of coaches discussed the sport psychology consultant being easily *accessible* as they were already contracted to work with their athletes: "We had funding services which, um, and sport psych, um, not a lot of the players grabbed it...so I asked 'Can I use the services?'" (KC). Others discussed accessibility through proximity in the environment. For example, one coach stated, "[T]here've been a couple of people over time that, that physically have been close, um, that have allowed the logistics for them to be able to help in my own coaching" (CK).

Coaches also emphasized the *desire to improve* as a coach through working with the sport psychology consultant. One coach stated, "I just wanna keep getting better. I wanna get better at communication. Um, I wanna get better at delivering the information to the athlete, um, to the individual athletes that I have" (AC). Another coach shared a similar sentiment, "I'm constantly trying to get smarter and more-, have more knowledge and, you know, communicate better and understand the technologies" (DI).

**Environmental stressors** represented negative environmental factors which led coaches to engage in work with the SPC. Over half of the coaches shared experiences of *job pressure* that led to feelings of stress. Job pressures included transitioning to a new coaching role that required changing the way they coached based on cultural expectations – "[I]t was mostly to do with, um, for me, a cultural transition back to New Zealand...adapting to different coaching styles" (KC),

and/or taking on a new role that changed the interactions with athletes. For example, one coach indicated, “I don't think I understood what I was getting into when I became a head coach of a national team...it fundamentally changes your relationship with athletes because now you're in a position of authority...it was hard to deal with” (BJ). Managing pressures around losing was another job pressure that lead coaches to work with the SPC – “[M]aybe we've lost a few competitions in a row and...everything's darker” (GJ).

Another main reason coaches gave for beginning their work with an SPC included *interpersonal conflict* with other staff members. The following quote exemplifies a female assistant coach who struggled in interactions with a male head coach:

[T]here was a male coach, um, that I was working for, for the first two or three years that, um, was very hard for me...I wouldn't speak up. And I wouldn't, um, feel like I had an important thing to say, even though I-I did. And [SPC] was the one that, that really kind of got me to the point where I had a voice and it was okay if he didn't agree with it (AC).

### **Benefits Coaches Received Through Sport Psychology Services**

Two general dimensions that reflected the benefits that coaches received from working with their SPC were **intrapersonal** and **interpersonal**. Intrapersonal embodies benefits that helped the coach focus on and improve the self and this theme had two higher-order themes – **facilitating introspection** and **performance enhancement**. Conversely, interpersonal signifies benefits that helped coaches improve their interactions with others and build on those relationships. The interpersonal dimension had three higher-order themes, these were **navigate media interactions**, **enhance communication with athletes**, and **friendship development**. For a visual representation of these themes, see Figure 1.

**Facilitating introspection** describes the ways that the SPC helped coaches to reflect on and evaluate their behavior. This theme had two sub-themes: *self-awareness* and *managing personal life stress*. A majority of coaches discussed gaining a level of self-awareness that contributed to their general improvement as a coach. This understanding about themselves was accomplished through reflection and feedback facilitated by their SPC. One coach stated:

I'm constantly trying to reflect and-and, uh, polish my performance and I think that's probably something I learned from [SPC] as well...[W]e do, uh, our reflection like, yeah, I need to be better or here or what do you think I can do better here? You know, and so I did use that sounding board to reflect (DI).

Coaches also discussed finding the SPC useful for relaying feedback from their athletes about their coaching that the athletes may not have felt comfortable telling the coach personally themselves. This feedback was typically relayed in a very general way without identifying any particular athletes. For example, one coach stated, “[T]here is also an opportunity to learn about how the athlete interacts with me and how the athlete feels I'm doing as a coach through that kind of medium of a sport psych” (TM).

A majority of coaches also discussed how useful their SPC was with helping them to *manage personal life stress* through self-examination. A common strategy coaches described for managing personal life stress was simply having regular check-in conversations with the SPC where they could openly discuss feelings of personal stress. One coach expressed:

[I]t's really import'nt to be able to, like I said in the beginning, to be able to reach out to people that you trust...trained sport psychologists...and the method of being able to sit in front of someone, look at 'em in the eye and go, 'so, how are you, really?' (CK).

Coaches also described how the SPC helped them develop perspective on the importance of balancing work as a coach and home life, and a minority of coaches emphasized that this is a need that all coaches have. One coach expressed:

[A] lot to be said about, you know, keeping a healthy work perspective because we work a shitload, we travel a lot...and I've been guilty of it. I've been guilty of, of um, you know, I don't neglect my wife by any means, but I know there's been times when I-I've selfishly, you know, um, gone to the gym or took this trip where I didn't absolutely have to. And it leads to a lot of stress, a lot of burnout...a lot of dark times, if you don't keep things in perspective (GJ).

The second higher-order theme under the intrapersonal dimension was **performance enhancement**. A majority of coaches expressed working on different aspects of performance enhancement during practice and competition. The first was *controlling emotions* when things are not going well with their athletes, often through specific skills such as breathing and meditation. One coach shared:

[S]ometimes I just react and get mad and I don't have the tranquility to know the right moment and the right way. Yes, he [SPC] gave me and the head coach the tools to know how to deal with that in a better way (FH).

Performance was also enhanced through learning how to *manage energy* throughout long days of training and competition, and this was likened to an athlete's performance - "preparing yourself not really much indifferent from an athlete to make sure you're maintaining the proper energy level, you know, to meet the standards of performance" (GJ).

For a minority of coaches, it was also important to *manage expectations* around winning and losing in a performance-driven environment. To manage expectations, one coach discussed



how to better cope with her response: “[M]y own expectations, um, expectations around winning and losing...Mine [response] typically is to withdraw...just working on techniques to be, you know, better at that” (KC).

The final way that coaches discussed enhancing performance in practice and competition was through the SPC helping them to *improve their decision-making*. A key skill that helped coaches with their decision-making was developing confidence - “[SPC] helped me work a lot on, uh, confidence in decisions. I think that was something that, uh, coming from an assistant coach to a head coach, it was something that I always, uh, always struggled with” (BJ). Decision-making was also improved through the use of relaxation techniques to allow for greater clarity as well as being given options by the SPC. As one coach described, “[H]e gives me a situation and possible responses. He doesn't tell me “this is what you have to do”...He offers a series of responses, several, so I can decide” (FH).

Within the second dimension, interpersonal, one of the interactions that coaches felt they enhanced through their work with the SPC was **navigating media interactions** at ‘big events’. Two coaches discussed ways that the SPC helped them to manage their interactions with the media following the outcome of an important game. One strategy was simply having *sideline conversations* prior to the press conference following a game. One coach expressed:

You're like the first response on everything. Whether that be around to the media, you're the first person to sort of open the debrief...That's probably when those communications with key people, when I was talking about having a sport psych sideline, that's quite useful before you go into those (KC).

Another strategy that helped coaches navigate media interactions at important events was developing *awareness of appropriate language* to use when in front of the media, regardless of the outcome, "...you have to be aware of what words are appropriate to use" (FH).

Coaches particularly valued working with their SPC to build strategies to **enhance communication with athletes** in and out of training and competition. An important aspect that became a foundation for coaches enhancing communication with their athletes was *understanding behavior* often through the SPC administering the Test of Attentional Interpersonal Style (TAIS; Nideffer, 1976) to coaches and athletes and discussing the results. Four coaches (across two SPCs) mentioned this approach. One coach shared that, "I had a better understanding of why a certain athlete would react to a decision that was made or something like that. Or even how athletes-- interact with one another" (BJ). Another coach discussed using *reflection* to think back about the TAIS from an athlete and use the information to explain athlete behavior.

Another way that SPC's helped coaches to enhance their communication with athletes was to help the coach *develop language* that was specific to the athletes and aided in building connection on an individual and team level. One coach shared the following quote:

Since I have players from different nationalities in the team, there are different customs and ways of behaving within the team. So getting to know and express the right word at the right time, according to their culture allow us to get better results. Knowing what each person's characteristics are will help us integrate it better to the team as a whole (FH).

One coach also suggested that *gaining feedback* from an SPC may be useful for enhancing communication with athletes for those who have not had this experience.

One other important higher-order theme under the interpersonal dimension was a **friendship development** with the SPC. For half of the coaches, the extended relationship with the SPC led to their interactions becoming more *reciprocal* where the SPC could also lean on the coach for support and advice in times when they needed it. One coach shared:

I very much felt it was reciprocal...I know she struggled with her boss at work for instance. We talked about that relationship quite a bit and things like that. When they changed direction and her boss left and was replaced, she struggled with that (BJ).

For a minority of coaches, the friendship facilitated *ongoing* interactions with the SPC despite no longer working as a coach or no longer having that SPC contracted to work with them anymore. One coach shared, "I'm in Toronto and she lives in Victoria. Certain things come up and I always ask her for her opinion or just everything...because she's just a really amazing person and somebody I want to keep in my life" (AC).

### **Barriers to Use of Sport Psychology Services as a Coach**

Though the coaches in this study were bought in to using sport psychology for their own performance as a coach, four higher-order themes (**lack of resources, stigma, SPC characteristics, and coach characteristics**) were elicited from the participants that emphasized barriers to using sport psychology services in this way as a coach.

The first theme was **lack of resources** which is described as limiting factors to using sport psychology services, often determined by the national governing body under which the coach was employed. The most commonly discussed barrier to using this service was *financial* limitation, "the biggest barrier would be financial" (BJ). Financial barriers were often associated with lack of *access*. As one coach put it:

[H]onestly we don't have [SPC] and access to [SPC] enough. Um, so, year over year we've tried to fight to have a little bit more time and a little bit more money so that we are able to use her a little bit more (TM).

Other coaches felt that *access* was a barrier due to the SPC having a busy schedule and working with multiple teams which limited their time with them – “I thought [SPC] was fantastic. Uh, but she worked with--I think she worked with like 36-- 30 different Olympic sports at the time. I just found it hard to get some of her time. She was super busy” (DI).

While a majority of coaches felt restrained by lack of resources, one of the coaches felt very strongly that lack of resources was not a barrier if you were determined. He stated, “[R]esources I don't necessarily buy. It's just like anything else...you know, you can- you can find it” (GJ). This coach believed that if a person wanted the support, they would find a way to get it.

Another heavily discussed barrier was **stigma**. This theme reflected negative perceptions from self and others about sport psychology service use by the coach. A majority of coaches did not divulge to others that they were engaging in sport psychology for their own performance as they felt that it may lead to a *perception of weakness* and the belief from others that they were not coping in a position where the leader is expected to be able to manage everything - “I feared that people would think that I wasn't coping” (KC). This perception of weakness was compounded by norms of masculinity described by one male coach – “[I]f you're having trouble dealing with things mentally as men, you're supposed to suck it up and be tougher and deal with it” (BJ).

Another aspect of stigma that coaches expressed was the notion of their program and support services being *athlete-focused* and not being something that coaches are expected to use.

One coach expressed, “[T]he program that we run is about the athlete so if there was a bunch of time being spent on me and not on them, there might be some eyebrows raised” (TM). Other coaches also emphasized the possible need for services, one quoting that, “[I]t’s an unhealthy-, terribly unhealthy profession, you know, how many of us are either sick, been sick, or have disastrous relationships and, like, there’s nothing...[T]here’s not structures in place” (CK). One coach also mentioned that, although the focus of SPC services is for the athletes, “that doesn’t mean it’s not as needed or maybe even potentially more needed for the coach” (DI).

**SPC characteristics** include attributes about the sport psychology consultant that may affect the relationship with the coach. One characteristic coaches felt was particularly important was the *compatibility* of the SPC and their ability to fit well with the coach. Compatibility included having “to make sure the chemistry is there” (AC), and being “someone that um, uh, that the coach is comfortable with” (KC). Coaches also expressed the need for aligned values:

[I]t’s very important that, you know, the person that you have working with you, um, kind of aligns with your own belief system...[Y]ou can have a great sport psychologist but if they’re in a different perspective, uh, or they don’t do a great job of finding out what your perspective is then things can go sideways very quickly (TM).

Other specific characteristics about the SPC that mattered to some coaches were the *qualifications* the SPC had. Specifically, two coaches emphasized that they preferred to have a clinically trained sport psychologist. One coach noted the value of having a SPC with both a mental health background and a sport background “...because then they have both layers” (TM). The other coach emphasized the importance being because “...they have to work under a supervisor. Um, they have...codes of ethics and, um, professional practice that people who do sport psychology don’t have to adhere to” (KC).

The majority of coaches emphasized that gender of their SPC did not matter and that they would have worked well with a male or female SPC. However, the two female coaches discussed having a *gender preference* for a female SPC. These coaches discussed specific circumstances driving their preferences such as “working with, the 14-17 year old girls...[SPC] had a 15-year old girl at home, I have a similar son at home” (AC) and knowledge of female specific concerns such as “eating disorders, pregnancy, domestic violence” (KC, also spoke of preference for clinical training).

The final higher-order theme for barriers was **coach characteristics** and this describes attributes about the coach that may affect the relationship with the SPC. Though all the coaches in this study had previous experiences with sport psychology and knowledge about what sport psychology is, a minority suggested that a barrier for some coaches could be *lack of knowledge of sport psychology*. One coach from Mexico emphasized that in his country, “Many coaches are not aware of the sport psychology work, and therefore they think it does not work” (FH).

The final characteristic that coaches in this study identified as a possible barrier was that some other coaches may *lack openness* to guidance from a SPC for their own performance. One coach commented, “if you're going to have a psych, you have to, um, take on-board their advice because otherwise that's no fun for the psych either, you know” (KC).

It is important to note that while the majority of coaches discussed positive experiences working with their SPC on their performance, one coach discussed limited work with their SPC and strongly emphasized his belief that other coaches in his sport culture would not engage, and even be resistant to engage, in such services for themselves. This coach cited perceptions of the SPC as a ‘white coat’ who would be perceived as critically and clinically analyzing coaches’ behavior to their detriment. He stated:

I just know my core of my, my community coaches. If I said, 'hey, there's a sport psych consultant that's wanting to help you out and make you a better coach, it'd be like, 'huh? What?'... They still sorta think, 'oh well, this is...still someone with a white coat, they're just not wearing a white coat. Um, you're gonna be analyzing me...then soon enough, they're gonna ask me about my mum and my dad and what my childhood was like (CK).

This coach discussed the role of peers (fellow coaches) fulfilling many of the roles that the SPC fulfilled for other coaches in this study.

### **Discussion**

The purpose of this research was to examine the experiences of high-performance coaches' use of sport psychology services for their own performance enhancement as a coach. A particularly interesting finding from this research was the way in which the majority of coaches came to begin working on their own performance with the SPC. These coaches brought the SPC into their team to facilitate their athletes' performance, emphasizing the "athlete-focus" of coaches (Weinberg et al., 2001) which was reinforced by their sport organizations.

For the majority of coaches, the process to beginning work with the SPC for their own performance was built upon a combination of factors, the biggest of which was seeing positive work that the SPC did with their athletes over a period of time. As these coaches viewed the positive interactions and outcomes with their athletes, they developed increased confidence and trust in the SPC and felt a level of compatibility with this person who was helping their team succeed. As trust and confidence in the SPC continued to increase over time, coaches' strong desire to improve coupled with the experience of significant stressors in the environment, lead coaches to initiate their own performance enhancement work with the SPC. Thus, for the majority of coaches in this research, their own performance work with a SPC was a secondary

outcome of bringing in a support service for their athletes (see Figure 2 for a visual representation of this impetus model). This secondary process of beginning a consulting relationship after seeing positive work and building trust has been described in previous research by Sharp and Hodge (2013), however, the current study expands on this work by describing specific circumstances (e.g., transitioning coaching roles and long periods of losing competitions) that lead to initiation of the work with the SPC.

Building trust in the relationship with the SPC allowed coaches to eventually open up and feel like they could ‘talk about anything.’ Within sport psychology, trust has been shown to be a key component to the consulting relationship (Sharp, Hodge, & Danish, 2015) and developing a trusting relationship between the SPC and client has been highlighted as encouraging clients to openly discuss different factors that affect their performance (Poczwardowski & Sherman, 2011). Most coaches worked with their SPC in an informal nature and the SPC maintained their formal role working with the athletes. Furthermore, coaches discussed valuing general feedback from athletes through the medium of the SPC. These actions create a dual-role for the SPC and may create concerns surrounding confidentiality, boundaries, and defining who the client is (Moore, 2003). In Sharp and Hodge’s (2013) study, the SPC worked in a dual-role with the coaches and athletes, however, trust was built with the coach through clarification of boundaries of confidentiality. Previous research has discussed the delicacy and challenges that SPCs perceive for maintaining boundaries of practice (Sharp et al., 2015).

For half of the coaches, the informal and long-term nature of the SPC-coach relationship eventually led to a reciprocal relationship where the coach and SPC could lean on each other for support and advice about stressors they were experiencing. While this type of relationship may be viewed as unprofessional to some, the job of a SPC is often filled with multiple roles, many



relationships, and engagement in different activities that a traditional psychologist would not face (Moore, 2003). Within this research, it seems that the relationship between many of the coaches and the SPC became more of a collegial/peer relationship rather than a consultant-client relationship. Gilbert and Trudel (2005) have discussed the important and diverse roles that peers play in the experiential learning process and development of coaches. Having access to knowledgeable peers who are respected and trusted for their knowledge can influence the reflective practice of coaches, facilitate development of new skills, and provide support (Gilbert & Trudel, 2005), much like the coaches in this study discussed. It is possible that coaches felt most comfortable in a collegial relationship because it is a familiar and accepted form of learning within coaching and affords a more equal status in the relationship, rather than engaging in the power differential of a typical consulting relationship (Aoyagi & Portenga, 2010). The notion of the colleague SPC rather than the consultant SPC suggests the multiple possible relationships that SPCs may engage in. Further exploration of the different roles and helping relationships that SPCs may undertake within a sport ecosystem, particularly in relation to coaches, is needed.

During this study, most of the participating coaches did not tell their bosses that they were using the SPC for their own performance, indicating possible fear of retribution for using an 'athlete resource' as one reason why. While coaches noted the athlete-focus of their programs, many expressed their opinion that sport psychology services should also be accessible by them as coaches as they are also a part of the team. Some even discussed the need for sport psychology services for coaches being more important at certain times, and under certain stressors, than for the athletes. This is reinforced by Sharp and Hodge's (2013) research.

Furthermore, coaches described a lack of structure for coach development and support beyond just sport psychology services. One coach noted that their organization gave coaches

permission to use all support services that the athletes used (e.g., sport psychology, physiotherapy, strength and conditioning) to improve their health and well-being, perhaps in recognition of the ‘unhealthy’ nature of the profession (Hill & Sotiriadou, 2016). However, after a month the organization reversed course and decided that only the athletes should be using those resources. Another coach described how unstructured the US sport system is and how it is a ‘wild west’ where you have to figure out where and how to find resources to develop as a coach on your own. It seems that despite the ongoing advocacy for the professionalization of coaching globally (ICCE, 2013; 2014), within North America, where high performance sport is advanced in its resources compared to many other nations, the structure for developing as a coach remains unclear (Duffy et al., 2011). Without clear coach development pathways, a majority of the coaches in this study took it upon themselves to engage in behaviors that contributed to their enhancement as a coach (such as using sport psychology services). This self-initiated approach to development as a professional has occurred in other professions where provision of formal structures for education and development were lacking or not effectively meeting the professional’s needs, such as within teacher education (Cushion et al., 2010).

Previous researchers have discussed how high performance coaches develop their craft in idiosyncratic ways (Werthner & Trudel, 2009), however, Mallet et al. (2013) have emphasized that there needs to be a more systematic approach to the continuing professional development (CPD) of high performance coaches. Furthermore, coach development needs to be more than consuming content and interpersonal knowledge. To facilitate effective development as a coach, CPD needs to also include intrapersonal development (knowledge of and caring for the self; Côté & Gilbert, 2009). While there may be many ways to facilitate development of intrapersonal (and interpersonal) knowledge and skills, sport psychology services seem to meet this need well.

Coaches in this study discussed many benefits that they gained through working with their SPC, much of which emphasized intrapersonal knowledge for self-improvement. Recent research with high performance coaches has found that intrapersonal knowledge requires both an understanding of the self and how one's actions and behaviors impact others (Ferrar et al., 2018). Within the current research, SPCs helped coaches develop self-awareness, manage personal life stress, and enhance their performance through providing feedback from themselves and others, and through facilitating psychological skills such as reflection. This combination of skill-building and feedback helped provide the coaches with an understanding of themselves as well as their impact on others, namely their athletes.

Reflective practice, in particular, has been a widely advocated approach to coach learning and education (Callary et al., 2013; Cushion, 2018) as it is posited to drive the learning of coaches and facilitate continued improvements in coach performance (Rynne et al., 2017). Engaging in reflective practice may be particularly salient for coaches within a high-performance context and, in fact, Rynne et al. (2017) emphasize that high performance coaches should involve themselves in regular, structured reflection to guide their own improvement as a coach. Hall and Gray (2016) have urged professionals in coach support disciplines, including sport psychology, to think about how they currently support the development of coaches' reflective practice. While there are many disciplines that could contribute to a coach's development of reflection (e.g., pedagogy or nursing), within the current study, SPCs were able to facilitate ongoing reflective practice with coaches in their training and competition environments and were able to maintain a level of contact that other professionals such as coach educators may not find viable. Though there is limited research within the field of sport psychology aimed at building reflective practice with coaches, studies such as Longshore and Sachs' (2015) mindfulness

intervention with coaches show connection to mindful practice and increased awareness, all of which contribute to reflection.

As with the intrapersonal knowledge coaches discussed as benefits to working with their SPC, interpersonal knowledge and skills were also important benefits that coaches felt they received. In particular, coaches valued developing skills to enhance communication with their athletes and to navigate media interactions. The importance of developing interpersonal skills that contribute to coach-athlete relationships and, in turn, athlete development and performance, has been emphasized greatly within the field of coaching (Côté & Gilbert, 2009; ICCE, 2013; United States Olympic Committee, 2017), as well as within sport psychology (Barker & Winter, 2014; Gould, Guinan, Greenleaf, & Chung, 2002; Jowett, 2007). Within the current study, coaches also valued gaining interpersonal skills to navigate stressful interactions with other personnel. It is evident that building adaptive interpersonal knowledge has value beyond simply improving interactions with athletes.

While the coaches in this study were able to successfully utilize an SPC to work on their own performance, some coaches discussed fear others would perceive them to be weak or unable to cope with their role as a coach if they knew about their work with the SPC. This fear of weakness was linked to norms of masculinity within sport where males are expected to ‘suck it up’ mentally and which undermine help-seeking behavior (Steinfeldt & Steinfeldt, 2012). Furthermore, one female coach also expressed this fear of perceived weakness which may not be surprising given previous research has conveyed the perception that coaching is a masculine role and that female coaches lack physical and mental strength which are deemed qualities critical for coaching (West, Green, Brackenridge, & Woodward, 2001). It may be particularly important that female coaches, at least outwardly, ascribe to masculine norms of strength and independence in

order to maintain their sustainability in sport and counteract stereotypes of female ‘weakness’. Another way female coaches may manage the male-dominated environment of sport is through connection with other females. Previous research has shown that women, particularly those who express multiple identities (e.g., as a women, a mother, a coach), may be ‘othered’ (Collins, 2000) and find it difficult to connect with their male peers in their sport organization, leading to feelings of isolation (Walker & Melton, 2015).

Within the current study, the two female coaches had a preference for a female SPC citing reasons such as the ability for them to connect better with other females in the male-dominated institution of high performance sport. One coach emphasized feeling a special connection with her female SPC due to the SPC also being a mother travelling away from home and being able to lean on each other for support with that. The other female coach emphasized greater comfort with a female SPC due to the understanding the SPC would have of ‘female concerns.’ Previous studies examining SPC characteristic preferences in athletes have found a preference for a SPC who is the same gender as this contributes to comfortability and ‘fitting in’ with the team (Martin et al., 2001; Lubker, Visek, Geer, & Watson, 2008). Given the preferences of the two female coaches in this study, it is critical that the field of applied sport psychology continue to examine how gender of the consultant may impact the perceptions (and openness) to consultation (Mapes, 2009), particularly with coaches.

### **Limitations**

This research contributes to the literature about high-performance coaches’ experiences of using sport psychology services for their own performance and included methodological strengths such as conducting two interviews with participants to add depth to the data. However, there are some limitations with this study. Using a snowball method to recruit participants was

difficult and resulted in a relatively uniform sample of coaches, many of whom were recruited through the SPC they worked with. It is important to emphasize the possible effect that this type of recruitment may have had on coaches' responses within the interviews. SPCs may have only chosen to send the study details to coaches who they felt would disclose positive experiences or coaches may have felt compelled to only disclose positive experiences with their SPC. Of note, one coach who was not recruited via a SPC discussed the most negative experiences and perceptions of working with a SPC.

In addition, the participants, though of six different nationalities, only coached in four different countries, three of which were native English-speaking countries and the sample was predominantly white (80%) and middle-aged males (80%). This lack of diversity in the sample limits the discussion of cultural and international differences in sport psychology service experiences for high-performance coaches. While the sample from this study represented only 20% female, this sample is representative of the high-performance coaching level where females are heavily underrepresented compared to males (18% of qualified coaches in the UK are female; Sport Coach UK, 2012, while only 24 of 138 (17%) of Rio 2016 Olympic and Paralympic Canadian coaches were female; [www.coach.ca](http://www.coach.ca)).

### **Practical Implications and Future Directions**

An important takeaway of this research is that, for the majority of coaches, the development of professional and performance support was through more of a collegial relationship rather than a formal consulting relationship. Given the typically organic development of collegial relationships, it may be important for individual SPCs and the field of sport psychology as a whole to understand the varied helping relationships and roles that SPCs may engage in, simultaneously, within the sport environment. Examining the practice of

becoming a colleague within a sport organization, rather than the ‘expert SPC’ which yields a certain power differential in relationships, may be important for further extending helping roles that a SPC may hold, particularly with coaches.

Utilizing SPCs to develop intra- and interpersonal knowledge may be a viable option for coaches, particularly if coach education or coach development opportunities are not provided by their sport organization. There is a need to better understand the role of the SPC within the broader picture of coach education and support to establish where sport psychology services may fit. SPCs should consider marketing the ways they can fit within the broader coach education initiatives by facilitating development of these knowledges and share the benefits expressed by coaches to stakeholders responsible for hiring support personnel and establishing coach education programs.

Despite openness to utilizing the services, the potential stigma from both other peers and the organization, particularly with the push for an athlete-focus, are problematic and may contribute to the lack of coaches using sport psychology services in this way. Sport organizations need to recognize the coach as a performer in their own right and the need for professional development opportunities that leadership in the elite context requires (ICCE, 2013). An act towards acknowledging these needs would be sport organizations ensure that lasting structures are put in place to enhance coach development (Rynne et al., 2017) through access to services including, but not limited to, sport psychology. Furthermore, helping coaches to identify an SPC who fits best with their preference and personality may enhance the trust-building process. Sport organizations may find the International Sport Coach Framework (ICCE, 2013) and International Coach Developers Framework (ICCE, 2014) as useful resources to building coach development within the context of their sport systems and country.

While most coaches utilized sport psychology services through the SPC contracted to work with their athletes, it is important to acknowledge that there are multiple ways that this relationship may occur. For one coach, it was an extended relationship with his SPC from being an athlete to becoming a coach. This coach maintained contact with his SPC throughout his sport role transitions. It may be useful for SPCs to maintain connection with athletes that they have worked with, particularly if they have insight into the athlete's future ambitions to coach. Additionally, another coach deliberately seeks out SPCs to work with on her own performance, seeking clinical qualifications. For these coaches, SPCs should ensure that they market their services by presenting information regarding the protection of their professional title/ qualifications and a summary of their training so that potential clients are informed consumers.

Future research should examine a wider range of high performance coaches in more diverse countries and cultures to determine if and how sport psychology services may be useful within different contexts. Further, given the preferences for clinical qualifications and gender that some coaches had in this study, additional research should examine whether these preferences are endorsed by other coaches and the value of such preferences. While this research examined both male and female experiences, future research focusing specifically on female high-performance coaches' experiences of and preferences for SPCs may provide greater insight into the possible unique challenges that women in high performance face. Finally, examining the extent to which SPC services may fit within professional development and educational structures for coaches may be particularly pertinent to extending the opportunity for collaboration between the fields of coaching and sport psychology.



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Table 1: *Participant Demographic Table*

<b>Sex</b>	<b>Age (years)</b>	<b>Nationality</b>	<b>Ethnicity</b>	<b>Country Coached in</b>	<b>Sport</b>	<b>Coaching in HP (years)</b>	<b>SPC Relationship Length</b>	<b>SPC</b>
Male	43	Australian	Caucasian	USA	Rowing	30	5 years	1
Male	44	Canadian	Caucasian	Canada*	Wheelchair Basketball	14	8 years	2
Male	47	Canadian	Caucasian	Canada	Golf	17	10 years	2
Male	35	American	African American	USA	UFC	15	14 years	3
Male	37	Irish	Caucasian	Canada	Golf	19	2 years	4
Female	55	Canadian	Caucasian	Canada	Golf	16	5 years	4
Female	49	New Zealander	Caucasian	New Zealand*	Netball	30	8 years	5
Male	52	Mexican	Hispanic	Mexico	Soccer	22	3 months	6
<b>Mean</b>	45.25					20.38	6.5 years	

\* These coaches were no longer coaching.

Table 2: *Table of Themes*

<b>Theme</b>	<b>Description</b>	<b>Exemplar Quote</b>
<i>Buy-in</i>		
Prior experience with sport psychology	Confidence in sport psychology through exposure to sport before beginning work with their SPC on their own performance as a coach	<i>I had a real keen interest to help myself. And then I thought, 'Hmm. This is really effective for me', and I believed in it. So I was like, 'Well, if it's effective for...me as a player, it'll be effective for me as a coach. (DI).</i>
Relationship development	Building trust in the SPC based on seeing positive work with the team	<i>When I can see how the other players, how the players and the girls are interacting with this coach [SPC] and they have that-they have that safe space and that trust, then that would make it even better and easier for me. (AC)</i>
<i>Opportunity</i>		
Access	The SPC was an available and proximal resource	<i>[T]here've been a couple of people over time that, that physically have been close, um, that have allowed the logistics for them to be able to help in my own coaching. (CK).</i>
Desire to improve	Coaches valued the chance to get better as a coach	<i>[T]o be quite straightforward...I want to be great, you know, um, and only-the only way to do that is through constant education and honest feedback with myself. (GJ).</i>
<i>Environmental Stressors</i>		
Job pressure	Aspects of coaching that lead to feelings of stress	<i>We didn't win a game. And so, you can imagine losing, um, creates a whole lot of-, you know, that's really tricky to manipulate. (KC)</i>
Interpersonal conflict	Strain in relationships with other staff	<i>[T]here was a, a male coach, um, that I was working for, for the first two or three years that, um, was very hard for me to, um...it was a real combination of his dominance and my insecurities that, that, um, got me to the point where I wasn't confident. (AC)</i>

Theme	Description	Exemplar Quote
<i>Facilitating Introspection</i>		
Self-awareness	Gaining a level of knowledge about the self through engaging in reflection, and receiving feedback from others	<i>I'm constantly trying to reflect and-and, uh, polish my performance and I think that's probably something I learned from [SPC] as well. (DI)</i>
Manage personal life stress	Developing perspective on work-life balance through conversations with the SPC	<i>[S]he gave me perspective on-on what was important and, uh, didn't only change my coaching, changed my life, changed...the way I look at things. (BJ)</i>
<i>Performance Enhancement</i>		
Control emotions	Become deliberate with emotional expression and learn how to decrease negative emotions in training and competition	<i>I've just found it a lot better when I'm present. Uh, when my mind is a little calmer and when my physiology is a little calmer, uh, and my mind is a little clearer and, uh, so then I'm more effective as a coach. (DI)</i>
Intrapersonal	Manage energy	Learn how to maintain energy levels and modulate accordingly throughout training and competition
	Manage expectations	Maintain realistic expectations and build an ability to react to expectations of winning or losing in more adaptive ways
	Improve decision-making	Enhanced ability to make adaptive decisions through increased confidence, relaxation, and being given options
		<i>[I]t is not only about the stress, but...also have to know when to be more energetic and when to be more flexible. (FH)</i>
		<i>[W]e spend a lot of time discussing...how do ya make sure expectations are...close to, to reality, knowing that you're dealing in the competitive environment and that fractions of a second have landed, in our sport, first through tenth or not even making it to the Olympics? (CK)</i>
		<i>I think that sport psychs...can be really helpful in your coaching confidence...they are really useful in terms of...your decision making processes. (KC)</i>

Theme	Description	Exemplar Quote
Interpersonal	Navigate media interactions	Build skills to manage media interviews through sideline conversations with the SPC and increased awareness of appropriate language
	Enhance communication with athletes	Improve interaction with athletes through reflection, developing an understanding of human behavior, developing connecting language, and feedback from the SPC
	Friendship development	Evolution of the relationship with the SPC to one that is reciprocal and ongoing
<hr/> <i>Lack of Resources</i> <hr/>		
Financial	Insufficient funding for SPC services	[C]ost is sometimes a barrier, uh, because you guys aren't cheap. (DI)
Access	Inability to use the SPC due to their busy schedule or when out of season.	[M]ost of the time, too, you only get funding during the, kind of, the season or the period, you know, and then when it's off-season...you don't get any support. (KC)
<i>Stigma</i>		
Perception of weakness	Belief that others would view use of SPC as a sign of inability to cope	[S]ome people could perceive it as a coaching weakness. 'Oh, he's not strong.' (DI)
Athlete-focus	Belief that support services such as SPC are expected to only be used for the athletes	[T]he program that we run is about the athlete so if there was a bunch of time being spent on me and not on them, there might be some eyebrows raised. (TM)

<b>Theme</b>	<b>Description</b>	<b>Exemplar Quote</b>
<i>SPC Characteristics</i>		
Compatibility	The ability of the SPC to fit within the team culture and coach's value system	<i>[T]here's compatibility issues as well, you have to find the right person. (BJ)</i>
Qualifications	Requirement that the SPC has clinical training	<i>I'd much rather have a clinical psychologist who, you know, has also got a mental health background because then they have both layers. (TM).</i>
Gender preference	Female SPC preferred over males for gender-specific concerns and connection	<i>I'm a big believer of woman, um, psychs...Because...the stuff that comes up and it comes up across different countries...are woman-specific. So for example, eating disorders...that woman are, um, complex around when to get pregnant...domestic violence in relationships. (KC)</i>
<i>Coach Characteristics</i>		
Lack of sport psychology knowledge	A shortage of education about sport psychology	<i>[A] bit of ignorance or a lack of knowledge as to what that person does could be a barrier. (TM).</i>
Lack openness	Not being willing to accept guidance from the SPC	<i>I don't see any barriers... unless you are not open to striving to get better. (AC).</i>

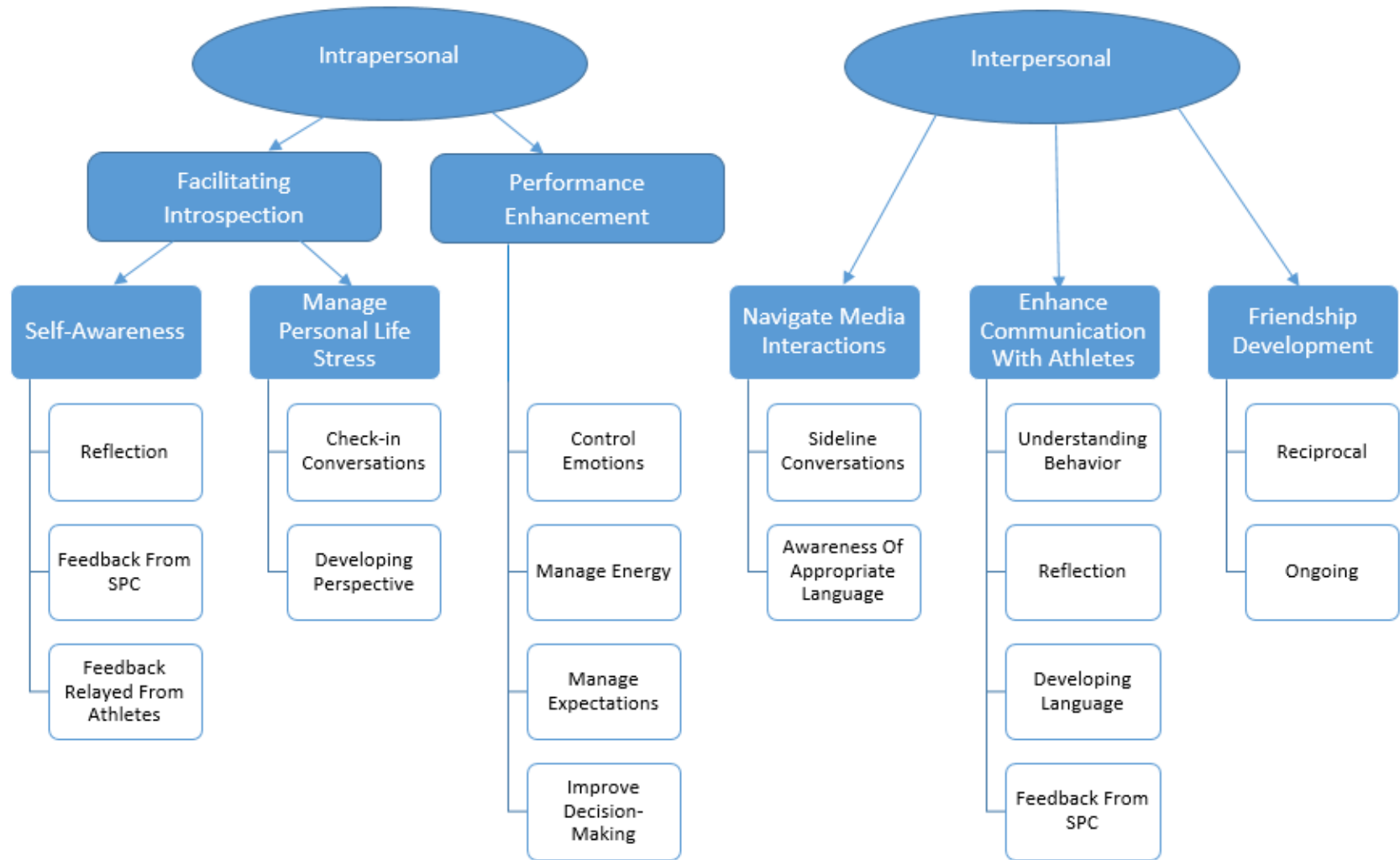


Figure 1. Code tree of benefits to engaging in sport psychology services for coaches' own performance.

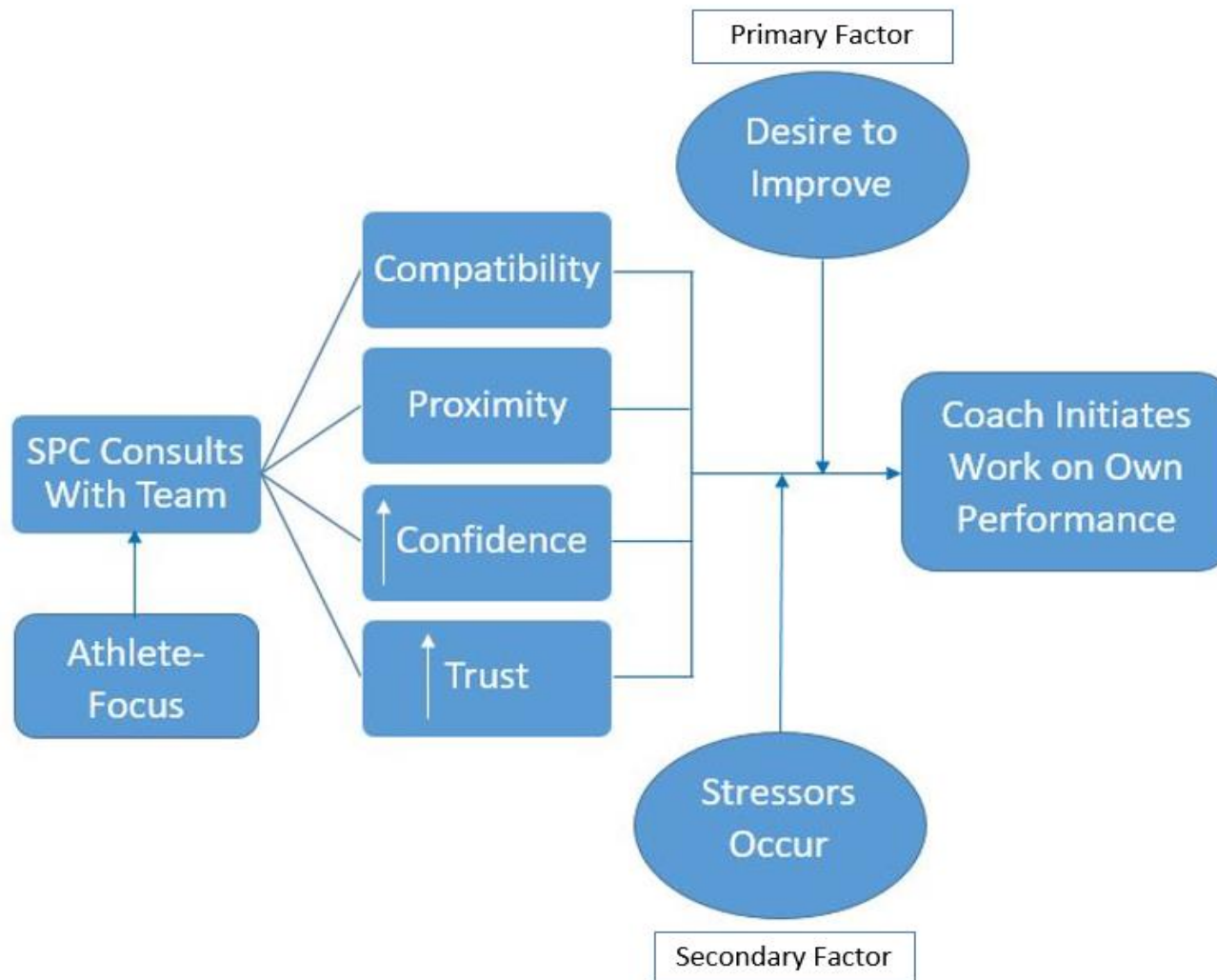


Figure 2. Impetus model for coaches engaging in sport psychology services for their own performance.



APPENDIX A

**Literature Review**

### **Literature Review**

This literature review will aim to provide an extensive discussion of the background of sport psychology consulting and effectiveness and the developing profession of coaching to determine where these two fields connect to enhance the performance of high performance coaches. The first section will discuss the effectiveness of sport psychology services by examining the tasks of an effective sport psychology consultant followed by a review of the effectiveness of performance skills used in sport psychology interventions for improving sport performance. This section will then be followed by a comparison of the roles a high performance coach holds as a facilitator and a performer, and these will be discussed in relation to coach attitudes to use of sport psychology. High performing coach performance stressors will follow this discussion and then transition into discussion of the current coach connection to sport psychology. As a description of the coach as performer is developed, the discussion moves into a section on the professionalization of coaching followed by a focus on the education and career pathways of high performance coaches, specifically. The final section explores the future research that is needed to help move the fields of applied sport psychology and high performance coaching toward an effective coach performer.

### **Effectiveness of Sport Psychology Services**

With a diverse clientele, the tasks of a sport psychology consultant are many and varied. Consultants help performers to maximize their potential by creating opportunities for improved self-awareness, self-assessment, and self-regulation through the facilitation of psychological skills interventions (Shaw, 2002). Furthermore, sport psychology consultants are tasked with helping clients enhance not only their performance, but also to adopt a holistic approach and help to enhance overall well-being in those they work with (Anderson, 2000; Petitpas, 1996). This

section will describe and explain the expected tasks and competences a sport psychology consultant requires to have an effective performance relationship with a client, rather than focusing on the holistic approach to consultation. Furthermore, the specific skills a sport psychology consultant uses with their clients will also determine the effectiveness of the consulting relationship and as such, a description of the most common types of interventions and skills taught to clients will be discussed as well as the level of effectiveness these interventions and skills have shown towards sport performance.

### **Tasks of a Sport Psychology Consultant**

Like many professional realms, the field of applied sport psychology has developed specific certification standards which consultants are expected to reach in order to work effectively with clients. A number of international organizations have developed accreditation for sport psychology consulting including the Association of Applied Sport Psychology (AASP) and the British Association for Sport and Exercise Sciences (BASES). According to AASP (2016), domains in which a sport psychology consultant must be proficient include rapport, roles, and expectations; assessment; goals, outcomes, and planning; implementation; evaluation; and professional issues. Within each domain are a list of detailed tasks that require knowledge of a range of different areas. For example, under rapport, roles, and expectations, tasks to fulfil include: establish and maintain rapport with the client, explain the consultant role within the specific setting or system with clients and important others, explain what is expected of the client, describe the consulting process, and discuss and/or clarify the consulting process to help clients make informed decisions (AASP, 2016). Comparative to the AASP competency standards for sport psychology practitioners, the BASES certification is used as a broader certification to become an accredited sport and exercise scientist in Britain in one of five divisions –

biomechanics and motor behavior, physiology and nutrition, psychology, physical activity and health, and sport and performance (BASES, n.d.). Given the broader focus of the BASES certification, the competency domains are broader to reflect all divisions. Competences include: scientific knowledge; technical skills; application of knowledge and skills; understanding and use of research; self-evaluation and professional development; communication; problem solving and impact; management of self, others and practice; understanding of the delivery environment; and professional relationships and behaviors (BASES, n.d.). Each competency area has more specific tasks that practitioners are required to fulfil in order to meet certification requirements.

One of the most important facets of both the AASP and BASES certifications is that the sport psychology consultant must provide evidence of practical experience under a certified supervisor (400 hours for AASP; 500 hours for BASES) as well as evidence of fulfilling each of the domains of competence before being granted certification. Additionally, as of 2017, AASP has added a knowledge proficiency exam that applicants must complete prior to having their credentials reviewed. While it may be argued that gaining accreditation suggests that SPCs have merely met the minimum requirements for practice and does not necessarily suggest competence, the amalgamation of course work, a proficiency exam, and supervised practical experience act in a combined gatekeeping capacity to ensure professionals are not only qualified but also competent enough to work with their clientele.

### **The Effectiveness of Performance Skills Used in Sport Psychology Interventions**

The field of sport psychology is constantly growing and psychological skills are continually being refined and researched. In her seminal works on the future directions for psychological skills training, Vealey (1988, 1994) discussed the importance of a well-rounded

psychological skills training program that includes a combination of foundation (e.g., self-awareness, self-confidence), performance (e.g., optimal arousal, optimal attention), and facilitative (e.g., interpersonal skills, lifestyle management) skills and techniques. This subsection will be delimited to discussion of six of the most researched and applied performance skills and techniques used in sport psychology interventions and the measured effectiveness of these skills from intervention studies. Though a further exploration could include examination of foundation and/or facilitative skills or non-intervention studies examining these performance skills, the purpose of this subsection is simply to give an overview of the effectiveness of performance skills used in applied interventions as the purpose of the proposed study is to examine application of sport psychology consultation (i.e., interventions) with coaches for their own performance.

As a sport psychology consultant, it is imperative that knowledge of and ability to teach psychological skills to clients is sufficient to aid in performance enhancement and contribute to well-being. The most researched performance skills used in interventions include stress management, emotion regulation, goal setting, self-talk, imagery, and attentional control. These six skills are included in the Test of Performance Strategies (TOPS; Thomas, Murphy, & Hardy, 1999) questionnaire which is a highly employed and reliable questionnaire in the sport psychology literature used to examine the major psychological skills athletes use. The TOPS has eight subscales including emotional control, goal setting, self-talk, imagery, attentional control, relaxation, activation, and automaticity (Thomas et al., 1999). Within this review, relaxation and activation are assembled under the umbrella of stress management which is a broader approach that has been discussed in applied sport psychology texts as being important for performance enhancement (e.g., Thomas, Mellalieu, & Hanton, 2009). While automaticity, which is closely

linked to flow, was not chosen as a skill of focus in this review as it has received much less attention in the sport psychology literature and interventions that have been conducted with flow have been relatively unsuccessful due to difficulty measuring this skill (Swann, Keegan, Piggot, & Crust, 2012).

Performers face a number of demands within the competitive environment and these demands can be potentially stress-provoking experiences. Many are able to manage stress in such an environment but there are also many who are not adept at managing such stress and could therefore benefit from learning and applying stress management techniques within the competitive environment. Rumbold, Fletcher and Daniels (2012) conducted a systematic review of 64 stress management interventions in sport and, in general, diverse stress management interventions were linked to improved stress experiences and enhanced performance. Specifically, of interventions that measured both stress and performance outcomes, 22 of 39 studies (56%) showed evidence for positive effects. Types of successful stress management interventions included cognitive (e.g., self-talk, imagery), multimodal (e.g., stress inoculation training, meditation, pre-performance routines), and alternative (e.g., progressive muscular relaxation, anger awareness) interventions. Stress management encompasses a broad range of interventions and skills that have been shown to be useful for performance improvement and could be particularly useful for performers in high pressure environments. Stress is also often linked to an emotional response which can be maladaptive for performance if not regulated. Consequently, stress management may also be coupled with emotion regulation techniques to facilitate optimal performance.

Emotion regulation is considered any process that affects the onset, offset, intensity, duration, magnitude, or quality of the emotional response (McRae, Ochsner, & Gross, 2011).

Emotion regulation is important for performance outcomes in sport (Wagstaff, 2014) as emotions experienced before and during competition have a number of performance implications (Hanin, 2010). For example, pre-event emotions have either detrimental or beneficial impact on performance and research has shown that negatively-toned emotions are not always detrimental and positively-toned emotions are not always beneficial to performance (Hanin, 2010). Despite emotion regulation being recognized as an important skill for performers to utilize, research examining the effect of emotion regulation on sport performance is limited. In one intervention, Wagstaff (2014) examined twenty competitive cycling athletes using an experimental design with each participant completing four conditions - familiarization, control, emotion suppression, and nonsuppression. In the experimental conditions (emotion suppression and nonsuppression) participants watched an upsetting video before performing the cycling task. The results of the study showed that when participants suppressed their emotional reactions to the video, their performance declined in statistical significance by taking longer to complete the task ( $F(2,20) = 4.8, p = .02$ ), exerting lower mean power outputs ( $F(2,20) = 41.47, p < .001$ ), achieving a lower maximum heart rate ( $F(2, 20) = 6.51, p < .01$ ), and greater perceived physical exertion ( $F(2, 20) = 5.90, p = .01$ ) than when given no self-regulation instructions for the video (nonsuppression) or when receiving no video treatment (control). These results suggest that suppression is a maladaptive way to regulate emotion and other strategies such as appraisal and reappraisal have been proposed as more adaptive for regulating emotions for enhanced performance (Uphill, McCarthy, & Jones, 2009).

Emotion regulation has also been examined in a national sporting organization (NSO) by Wagstaff, Hanton and Fletcher (2013) who conducted an intervention of three educational progressive workshops with 25 stakeholders (i.e., chief executive officer, heads of performance,

national coaches, administrators, club coaches, team managers, and talent academy athletes) of the organization followed by six one-on-one coaching sessions with three pivotal stakeholders (i.e., national managers). The workshops and coaching sessions facilitated emotional awareness and adaptive emotion regulation strategies to improve individual and organizational functioning. The results showed that following the intervention, use of emotion reappraisal strategies significantly improved ( $Z = 3.13, p = .002$ ) as did relationship closeness ( $Z = 3.37, p = .001$ ) and relationship quality ( $Z = 3.25, p = .001$ ). Further, a significant decrease in emotion suppression strategies was reported ( $Z = -2.47, p = .014$ ). The ability to regulate emotions in adaptive ways can lead to enhanced performance and there are many strategies that can be used to regulate emotion effectively.

Goal setting has been used extensively in sport to help improve one's performance. A goal is defined simply as the aim or objective of an action or what an individual is attempting to accomplish (Locke, Shaw, Saari, & Latham, 1981) and within sport goals are typically broken into three categories: performance, outcome, and process goals (Weinberg & Gould, 2015). Performance goals are goals that focus on achieving a standard of performance (e.g., running a mile in under six minutes). Outcome goals focus on an end result or outcome (e.g., coming in first place in a race). While process goals are goals that focus on specific actions of the individual or athlete to improve strategy, form, and technique (e.g., bending knees to shoot a basketball). Researchers have written that setting process and performance goals is more important than setting outcome goals as process and performance goals are in the individual's control (Burton & Weiss, 2008). Furthermore, Kyllö and Landers (1995) conducted a meta-analysis of 36 studies that used goal setting interventions and reported a significant overall effect size of 0.34 for overall improvement in performance. Furthermore, short-term goals only ( $d =$



0.38) and a combination of short and long term goals ( $d = 0.48$ ) were more effective than only long-term goals ( $d = 0.19$ ). Tod, Edwards, McGuigan, and Lovell (2015) conducted a systematic review of the effect of a number of cognitive strategies (including goal setting) on muscular strength performance and found that positive effects were found in 65% of studies for the relationship between goal setting and increased strength performance characterized by a combination of maximal strength, muscular endurance, and power. Setting systematic and varied types of goals can help to optimize performance in a number of ways, and this process is one of the most basic skills a performer can learn to utilize for directing and enhancing performance. Another skill that is often used successfully in conjunction with goal setting (and that is typically used to remember and cue goals) is self-talk.

Self-talk can be described as statements we say to ourselves that can direct and facilitate one's performance (Hatzigeorgiadis, Zourbanos, Galanis, & Theodorakis, 2011). Self-talk is considered a multidimensional construct that includes dimensions of frequency (i.e., how often one uses self-talk), overtness (i.e., whether the self-talk is audible to others or not), valence (i.e., the content of the self-talk – positive or negative), motivational interpretation (i.e., the extent to which the self-talk is viewed as either motivating or de-motivating), and the reason one uses the self-talk (i.e., to function as self-instruction or as motivation; Hardy, 2006). The effectiveness of self-talk on sport performance has been examined by Hatzigeorgiadis et al. (2011) in a meta-analysis of 32 studies using self-talk interventions to improve sport performance. The results showed an overall positive moderate effect size of 0.48. Furthermore, Hatzigeorgiadis et al. (2011) conducted moderator analyses on the selected studies and findings revealed that self-talk interventions were more effective with fine motor ( $d = 0.67$ ) and/or novel tasks ( $d = 0.73$ ) than with gross motor ( $d = 0.26$ ) and/or well-learned tasks ( $d = 0.41$ ). Two other moderators were

significant in these analyses and those were training and research design. For training, results showed that interventions that consisted of the provision of some form of training in self-talk were more effective ( $d = 0.8$ ) compared to interventions that did not provide self-talk training ( $d = 0.37$ ). Finally, studies that used a multiple baseline measures design ( $d = 1.31$ ) were more effective than studies using a pre- and postintervention measures for experimental and control groups design ( $d = 0.53$ ), studies using a postintervention measures for experimental and control groups design ( $d = 0.37$ ), and studies using a pre- and postintervention measures for experimental group only design ( $d = 0.36$ ). Self-talk was also a cognitive strategy examined by Tod et al. (2015) in their systematic review of strength performance and they reported that, in general, positive effect sizes for the relationship between self-talk and increased muscular strength were reported in 61% of studies and, in particular, motivational self-talk was the most effective for increasing muscular strength (in 70% of studies with positive effects). It is evident from the interventions discussed above that self-talk can be an effective psychological skill to use with clients in a range of contexts. The versatility and relative ease of self-talk makes it a popular skill to complement other skills (Vealey, 1988), in particular, many consultants will use self-talk with imagery as self-talk can cue a particular image in one's mind.

Imagery is using a combination of senses to perceive an experience in the mind that mimics real experience (Cumming & Ramsey, 2009). In a review of imagery literature by Weinberg (2008), imagery was shown to have the ability to positively influence performance as evidenced by case studies, laboratory experiments, anecdotal reports, and multimodal interventions that include imagery. Weinberg noted that having an array of sources that consistently point to the effectiveness of imagery on performance adds weight to the usefulness of imagery for performers. Within Weinberg's (2008) review, it is noted that imagery

effectiveness may be moderated by the type of task being performed, for example, tasks that are cognitive-oriented are performed more effectively through using imagery than motor-oriented tasks, though it is important to note that imagery is effective for all types of tasks. Other moderators of imagery effectiveness include the valence of the imagery and the timing of the imagery. Research has clearly demonstrated that positive images facilitate enhanced performance, while negative images debilitate performance. For timing, there is a wide consensus that performers should image in real time, that is, rehearse a performance using the same rhythm and tempo as an actual performance for enhanced effects. Imagery has also been shown to positively influence muscular strength. Tod et al. (2015) also included imagery in their systematic review of the effect of cognitive strategies on muscular strength performance and found that 63% of studies reported positive effect sizes for the relationship between imagery and increased muscular strength. Overall, Tod et al. (2015) explained that obtaining a level of proficiency with imagery use can be difficult for some to reach, however, if one is able to learn effective imagery practices, the level of flexibility with this skill can provide potential benefits for performance in many ways. As a specific example, imagery can be effective at directing attention to important features of technique or cues in the environment.

Attentional control is also a skill that is commonly used in performance interventions with athletes. Goldstein (2008) defined attention as “the process of concentrating on specific features of the environment, or on certain thoughts or activities” (p.100). Attention is acknowledged as a multidimensional construct with three separate components – concentration (the deliberate decision to invest mental effort in important things), selective perception (choosing which cues to focus on and which to ignore), and divided attention (the ability to perform two or more actions at the same time; Moran, 2009). Given these three components of

attention, it may be no surprise that attentional focus and control can greatly contribute to how well one performs. Wulf (2013) conducted a review of attentional focus literature in relation to performance and reported a number of variables important to successful performance. Firstly, an external focus of attention (in which performers direct their attention to the effects of their movements in the environment) has consistently been shown to improve a number of performance indicators (e.g., increased accuracy, reduced muscular activity, higher peak force production, and increased speed and endurance) compared to an internal focus of attention (in which performers direct their attention towards their own body movements; Wulf, 2013). Additionally, the benefits of an external focus compared to an internal focus of attention have been shown across a variety of skills/tasks (ranging from pressing keys to swimming), across different levels of experience (from novice to expert), and in diverse populations (ranging from children to older adults, and even those with motor impairments).

The effectiveness of sport psychology services can be determined in a number of ways. In this literature review, we chose to describe the tasks and expectations of a sport psychology consultant as well as six of the more prominent and effective skills and interventions that have been shown to help improve performance. Though this review has focused on these six skills, there are a wider array of services that SPCs provide to their clientele than just psychological skill building. Effective SPCs hold multiple and varied roles as performance enhancers, personal supports, and confidants (Orlick & Partington, 1987), all of which contribute not only to the performance of clients but also to their well-being. Providing evidence of the effectiveness of sport psychology services is important for advocating the use of sport psychology with coaches as clients. The six skills discussed in detail are all skills that could enhance the performance of coaches and the current literature of coaches' personal engagement with psychological skills

such as these will be discussed later in this review. Despite some engagement in the literature acknowledging coaches' use of psychological skills, many of those in the field of sport psychology, and coaches themselves, often see themselves as simply the facilitator for performance services for their athletes. Coaches hold many roles and though facilitator for their athletes' performance is certainly one, so too is the coach as a performer in their own right (Thelwell et al., 2008).

### **Coach as Facilitator and Performer**

The focus of this section is to examine the different roles that coaches can have within a sport psychology consulting relationship – that of facilitator and performer. As a facilitator, the coach is responsible for making decisions about what services and resources are available to athletes to aid in enhancing their performance, including access to sport psychology services. Therefore, we will explore coach attitudes towards sport psychology services as attitudes typically guide decision-making and will reflect the openness, or lack thereof, of a coach to use sport psychology services with their athletes. This discussion will end with an examination of coach attitudes towards using sport psychology for their own performance as a coach. After examining coach attitudes towards sport psychology services, this section will move further into examining the coach in the role of a performer. To accomplish this, the varied performance stressors that a coach faces will be explored, followed by a discussion of sport psychology interventions that have, to date, been used with coaches and their relative effectiveness in enhancing coach performance.

### **Attitudes Towards Sport Psychology**

Coaches hold a central and important role in the athletic environment, responsible for preparing their athletes not only technically and tactically, but also to develop the person physically, socially, cognitively, and emotionally as is appropriate within the context in which they coach (ICCE, 2013). Each of these areas of an athlete contribute to their performance and, traditionally, coaches, particularly in the high performance context, have utilized sport psychology services to either help in the facilitation of teaching performance skills to their athletes or to work directly with their athletes on their performance. The coach also acts as a ‘gatekeeper’ for their athletes as a person who is in a position to help their athletes access professional support services if and when they are needed (Mazzer & Rickwood, 2009).

As an important ‘gatekeeper’ for their athletes, coaches will make decisions for what and who they believe is going to be beneficial for their athletes’ performance and well-being (Partington & Orlick, 1987; Ravizza, 1988). As such, the expectations and attitudes a coach holds of sport psychology could influence their willingness to integrate mental skills and sport psychology services into their athletes’ training (Martin et al., 2012). Therefore, it is important to examine the attitudes coaches hold towards sport psychology consultants and the services they can provide. There are a number of studies that have examined attitudes towards sport psychology by coaches in different contexts, including youth sport coaches (Barker & Winter, 2014), high school coaches (Zakrajsek et al., 2011), collegiate coaches (Allen, 2013; Zakrajsek et al., 2013), and Olympic coaches (Gould et al., 1991). Martin et al. (2012) conducted a review of the literature on attitudes towards sport psychology and seeking sport psychology services. In their section on coach attitudes, Martin et al. (2012) indicated that the most consistent factor influencing coaches’ expectations, attitudes, and use of sport psychology services with their

athletes is previous experience with sport psychology. Specifically, coaches with more sport psychology knowledge and previous consulting experience are more open to using and confident in sport psychology services, have more realistic expectations about consulting compared to coaches with limited knowledge or no previous experience, and are less likely to stigmatize sport psychology (Nelson, 2008; Zakrajsek & Zizzi, 2008).

A number of other factors have been shown to influence the attitudes coaches will hold of sport psychology services for their athletes. Gender is one such factor and it has been revealed that female coaches, in particular, are less likely to stigmatize sport psychology services and have more favorable attitudes toward having sport psychology services available for their athletes when compared to male coaches (Wrisberg et al., 2010; Zakrajsek & Zizzi, 2008). The largest discrepancy in attitudes towards sport psychology services between female and male coaches is observed in male coaches of contact sports where a culture of masculinity is promulgated (Martin, 2005; Zakrajsek et al., 2011). Within the confines of this masculine socialization, norms of aggression, toughness and independence are emphasized and these norms undermine help-seeking behavior which can include the use of sport psychology services (Steinfeldt & Steinfeldt, 2012).

Coaches' attitudes regarding sport psychology are influenced by their age, years of coaching experience, and education background as well. Zakrajsek et al. (2011) examined the influence of these antecedent factors on high school coaches' attitudes towards sport psychology. Results showed that older coaches, those who had more years of coaching experience, and those who had a higher level of education (i.e., had earned a graduate degree) were less likely to stigmatize sport psychology, were more open to services, and were more confident in consultation when compared to their counterparts (younger coaches, less years of coaching

experience, and lower level of education). Schempp and colleagues (2006) may shed some light on the difference in openness between coaches with less experience and those with more experience. These authors describe the beginner coach as one that delivers structured practices and focuses on maintaining athlete behavior over learning, while the excelling to expert coach is more flexible and committed to learning and synthesizing new knowledge. For beginner coaches, bringing in another person to the team may be overwhelming, add another factor that is not in their control, and not be viewed as important for their focus (athlete behavior vs learning). Conversely, for more experienced coaches, the commitment to learning and synthesizing new knowledge may lend itself to greater openness to services such as sport psychology.

Qualitative studies have more recently been conducted with coaches to examine their perceptions of what makes an effective sport psychology consultant (SPC) and these may further influence a coach's attitude and decision to utilize such services. Zakrajsek and colleagues (2013) conducted one such study and their findings indicated that coaches considered an SPC's ability to build a trusting relationship to be of central importance to their effectiveness. This has been a consistent finding in other research as well (e.g., Sharp & Hodge, 2013). Additionally, coaches perceived the SPC's ability to fit in with their team and relate to athletes, while maintaining professional boundaries, as other characteristics that contribute to consulting effectiveness. Furthermore, coaches felt that an SPC needs to be able to work within the coach's own system and be on the same page with the coach.

Though coach attitudes towards sport psychology services are generally positive, there are some barriers that coaches have identified about using these services with their athletes. The most significant barrier discussed by Ravizza (1988) in his seminal paper on consulting concerns was the negative connotation attached to sport psychology and associated negative perceptions of



psychology. This barrier is connected to another commonly discussed barrier – lack of sport psychology knowledge (Barker & Winter, 2014; Pain & Harwood, 2004). Without appropriate knowledge of what sport psychology is and can offer for a person's performance, and without knowledge of the differentiation between mainstream psychology and sport psychology, this barrier continues to limit opportunities for SPCs even today. Another significant barrier that has been discussed in the literature by coaches is accessibility. Many coaches have stated that they are unsure of how to go about identifying and accessing sport psychology services in their area (Barker & Winter, 2014; Scully & Hume, 1995). Other studies with coaches have reported lack of resources and funding (Allen, 2013; Pain & Harwood, 2004), and time constraints (Gould et al., 1999) as barriers to utilizing sport psychology services.

The majority of attitude studies with coaches and the associated barriers have been targeted towards the coach as a facilitator for services with their athletes. For example, many of these studies utilized the Sport Psychology Attitudes Revised Coaches-2 Brief Questionnaire (SPARC-2 brief) which asks coaches to rate statements on a 6-point likert scale ranging from 1 (strongly disagree) to 6 (strongly agree) about the appropriateness and effectiveness of sport psychology services for their athletes. Examples of items in this questionnaire include “A sport psychology consultant (SPC) can help athletes improve their mental toughness” and “Athletes should know how to handle problems without needing assistance from a SPC.” These attitude studies reinforce the traditional view of the coach as someone who acts as a gatekeeper or facilitator, deciding whether sport psychology services will be useful for their athletes' performance or not. The dearth of studies examining coach attitudes and barriers for utilizing sport psychology services for their own performance brings to light a gap in the literature that needs to be rectified. This is particularly pertinent given that many of the barriers reported by

coaches could also be considered barriers to utilization of sport psychology services for their own performance as a coach. Giges and colleagues (2004) have expressed the need for recognition of the coach as a performer in their own right and as a possible recipient of sport psychology services for their own performance.

A small quantity of literature has begun to recognize this potential need for coaches. For example, youth sport coaches in Barker and Winter's (2014) study discussed the potential for SPCs to help coaches improve their interactive skills and build effective coach-athlete relationships. In addition, SPCs themselves have discussed the need to shift their focus to working with coaches on their own performance in elite competition contexts (Sharp, Hodge, & Danish, 2014). Sharp & Hodge (2013) also conducted a study examining what makes an effective coach-SPC relationship and through the positive perceptions coaches had of the work their SPCs had done with athletes, coaches started to work with the SPCs to improve their coaching performance. These studies indicate not only the important role that sport psychology services could play in aiding a coach's performance but also the interest and investment that coaches themselves may have in utilizing these services. This perspective on the use of sport psychology services is important as the performance stressors a coach faces are many and varied.

### **Coach Performance Stressors**

Coaches face many of the same stressors as athletes as they are expected to adequately manage their own physical and emotional state as well as their own personal recovery in order to perform optimally (Thelwell et al., 2008). Furthermore, coaches need to manage time and resource constraints, public pressure to perform, and competing demands (Altfeld et al., 2015) from athletes, administrators, parents, and their own families. A number of studies have

identified different types of stressors coaches contend with and these include competitive stressors (e.g., managing athlete needs, professionalism, selection issues), organizational stressors (e.g., managerial conflict, lack of financial assistance, role conflict), and personal stressors (e.g., sacrificing personal time; Frey, 2007; Olusoga et al., 2010; Thelwell et al., 2008). Chroni, Diakaki, and Perkos (2013) conducted a qualitative study examining coaches' stressors during training and competition and coaches often cited concerns about their own work/performance during training and during competition. The only stressor cited by more coaches, perhaps not surprisingly, was concern for their athletes' skills and performance during competition. With a large number of possible stressors in their work environment, coaches can experience severely negative consequences if these stressors are not appropriately managed (Fletcher & Scott, 2010).

Consequences of coaches experiencing stress can range in severity and include emotional exhaustion, depression, and withdrawal from sport (Frey, 2007; Olusoga et al., 2010). Bentzen et al., (2016a) examined trajectories of exhaustion in high performance coaches over the course of a competitive season and found that 15% of coaches examined began with low exhaustion that developed into high levels of exhaustion over the season, while 10% of coaches started out with high exhaustion and maintained that level of exhaustion over the course of the competitive season. Additionally, coaches who had higher levels of exhaustion exhibited a maladaptive profile which included a higher perceived workload and work-home interference, and lower levels of recovery, identified regulation, and intrinsic motivation (Bentzen et al., 2016a).

Exhaustion is also a prominent variable of burnout (Bussing & Glasser, 2000) and research by Raedeke, Granzky, and Warren (2000) examined the exhaustion component of burnout in USA Swimming coaches through a commitment model perspective, reporting that

coaches who exhibited characteristics of entrapment (feeling pressure to remain in a position/job that is no longer desirable) had significantly higher exhaustion scores than those who did not feel entrapped. Raedeke et al. (2000) discuss the relation of high exhaustion to burnout through a commitment perspective and emphasize that there may be many mechanisms through which a coach can burnout. Further research has examined burnout in coaches across a competitive season (Altfeld et al., 2015). Results of Altfeld et al.'s (2015) study revealed that full-time coaches experienced increased stress and burnout at the end of the season. Burnout can be particularly worrisome as it can lead to intentions to withdraw from sport (Smith, 1986). Experiencing extreme stress to the point of exhaustion and/or burnout can also lead to overall ill-being (ill mental health) in coaches. Stebbings, Taylor, Spray, and Ntoumanis (2012) examined antecedents to interpersonal behavior of coaches from different contexts (ranging from recreational to professional levels) and found that fewer opportunities for professional development and high work-life conflict were associated with thwarted psychological needs (of autonomy, competence, and relatedness), perceived controlling interpersonal behavior, and psychological ill-being in coaches.

As with all professionals, fulfillment of basic psychological needs are important for coaches' growth and well-being (Allen & Shaw, 2009). Often these needs are fulfilled or thwarted by the perceived support of the organization or administration that oversees and employs the coach. The impact of organizational support on need satisfaction has been examined in a number of work environments and has indicated that perceived organizational support leads to fulfillment of basic needs, while no perceived support from the organization has been linked to need thwarting (e.g., Gillet, Fouquereau, Forest, Brunault & Colombat, 2011). In a similar vein, previous research by Gould, Guinan, Greenleaf, and Chung (2002) showed that coaches that

perceived they were in a positive environment, which included support from their sporting organization, was important for their effectiveness in coaching. Research by Allen and Shaw (2009) compared the basic psychological need satisfaction of women high performance coaches in two sporting organizations and results showed that coaches in Organization A felt a sense of autonomy, competence and relatedness as the organization gave them independence to make decisions under clear guidelines, provided high quality training opportunities, and showed interest and involvement in the coaches' lives such that they felt a sense of connection.

Conversely, the coaches in Organization B felt their psychological needs were largely thwarted as the organization gave independence but failed to provide guidelines, did not provide training opportunities, and provided a lack of involvement with or valuing of the coaches. When coaches do not feel supported or satisfied in their work environment, it can lead to a decision to transition out of that environment. Knight, Rodgers, Reade, Mrak and Hall (2015) examined factors related to coaches' decisions to transition and, across two studies, they determined that one of the main negative factors related to a coach's transition was the desire to leave a negative or challenging work environment characterized by negative relationships with athletes or parents, a perceived lack of support from supervisors, and an imbalance between workload and compensation. This issue is a concern because transitioning from one position to another, or out of the coaching profession, can cause stress and negatively influence the psychological well-being of coaches (Raedeke, Warren & Granzky, 2002).

For many coaches, job insecurity is a concern that is accepted as 'part of the job', particularly within high performance contexts which are highly dynamic and susceptible to rapid turnover based on cyclical evaluation (e.g., 4-yearly Olympic cycles; Wagstaff et al., 2015). Coaches may be faced with career termination or transition for a number of reasons including

deselection, poor performance, illness, injury, and burnout (Kentta, Mellalieu & Roberts, 2016). However, despite awareness that there may be insecurity in their career, coaches typically fail to engage in career planning and activities outside of coaching (Kentta et al., 2016). As a result, many coaches are not adequately prepared for life after coaching or for the transition to another position, particularly when facing unexpected or sudden termination or change. For example, Kentta et al. (2016) retrospectively examined the career termination of an elite (high performance) female coach using case study methodology and found that following the unexpected failed performance of her athlete at the 2012 Olympic games, this coach experienced a lack of ability to cope with the changing demands of her environment, resulting in strain and challenge to her well-being. The coach also reported a lack of perceived available social support all of which contributed to a transition out of coaching. Coaches may experience many stressors in their career that can affect their performance and these have the potential to lead to a number of negative outcomes. Possible solutions to help manage stressors and other performance-related variables have been suggested by many authors. For example, Altfeld et al. (2015) suggested that it could be useful for coaches to learn person-centered strategies such as relaxation, conflict management, time management skills, and social skill training to help manage strains during the season. Furthermore, Bentzen et al. (2016a) have emphasized the unstructured nature of coaching and how it may be most helpful to address stressors individually as needs may vary based on sport and performance level. In alignment with these suggestions, sport psychology interventions may be useful to help coaches with their varied performance stressors.

### **Sport Psychology Connection With Coaches**

Though the use of sport psychology skills has most commonly been examined in athletes, Weinberg and colleagues (2001) conducted a study examining high school coaches' use of a

commonly used psychological skill – goal setting. Their findings indicated that coaches set goals for individual athletes, for the team, and also for themselves. Goals set for themselves tended to focus on player development, personal development, and administrative duties. However, it was noted that coaches' own goals often revolved more around their team than themselves.

Furthermore, though the results described the coach goals set and expanded on their personal development goals, Weinberg et al.'s (2001) discussion of the findings scarcely touched upon these goals, with the authors stating that they decided to focus only on the important findings that relate to previous quantitative literature on team and individual goal setting. By ignoring discussion of coaches' personal development goals, these authors are continuing to perpetuate the coach's role as facilitator and discounting their role as a performer in their own right.

Years after Weinberg et al.'s study, Thelwell et al. (2008) conducted a novel study examining the use of four psychological skills by 13 elite-level coaches. Their findings indicated that elite coaches use all four of those skills – self-talk, imagery, relaxation and goal setting, but that they use self-talk and imagery more often than relaxation and goal setting. Findings also indicated that the coaches used these skills at different times and for different purposes. For example, all elite coaches expressed using self-talk and 11 coaches expressed using imagery before, during, and after both training and competition to control emotions and to instill confidence in themselves. Self-talk was also used by coaches to plan session talks, to enable rational thinking, and to get themselves into an appropriate mindset. While imagery was further used to imagine appropriate technique, to develop sessions, and to verbalize coaching points. Despite relaxation and goal setting being used less by coaches, they were, nonetheless, both utilized in training and competition environments and for a number of reasons. Six coaches discussed using relaxation to help with rational thinking, to slow things down, to give feelings of

control, to put across correct body language, to benefit communication, to cope (with poor sessions and with individuals not improving), to reduce pressure, to enhance the control of decisions, and to put across a confident persona. Five coaches also mentioned using goal setting for a number of purposes including aiding organization, benefitting communication, providing aspirational standards for themselves (such as aiding in personal development and ensuring personal motivation), to help visualize aims, to facilitate appropriate focus, to get into the correct frame of mind, to help control emotions, and to cope with difficult training sessions.

It is evident from this study that coaches may already utilize a variety of psychological skills in a number of different settings and for a number of different purposes, many of which reflect a performance standpoint (e.g., to enhance control, for confidence, and to facilitate appropriate focus). Though only four psychological skills were examined in this study, it is a promising starting point that makes a connection between coaches and sport psychology services and these findings suggest that coaches already view themselves as a performer. Furthermore, coaches may desire gaining further tools and skills to use in their own coaching practice and performance.

A small volume of literature that explores sport psychology interventions with coaches has recently developed. Longshore and Sachs (2015) conducted a mindfulness training intervention with 20 Division I collegiate coaches and found that those who participated in the training increased in mindfulness (though not to a statistically significant level), had significantly decreased trait anxiety ( $r^2 = 0.26$ ), and showed improved emotional stability as evidenced by a significant decrease in both positive ( $r^2 = 0.22$ ) and negative ( $r^2 = 0.43$ ) emotions compared to coaches in the control group. Furthermore, qualitative results of this intervention indicated that coaches increased their self-awareness such that it positively affected their coaching behaviors



and interactions with athletes. Coaches also described how the training impacted their ability to approach problems with acceptance rather than reactivity, reduce stress by bringing mindfulness into competition situations, and increased ability to attend and focus on the task at hand. Coaches also expressed improved personal life relationships and greater work-life balance. Despite Longshore and Sachs' (2015) study only utilizing one psychological skill, the outcomes both quantitative and qualitative speak to the usefulness of this type of training for coaches in their performance.

Another sport psychology intervention conducted by Olusoga and colleagues (2014) aimed to enhance coaches' ability to cope with stressors through teaching mental skills. This training included applied relaxation, confidence-building exercises, communication strategies, and cognitive restructuring. Five coaches who had coached at least at a national league level in the UK participated in this intervention. Results showed coaches had a more positive perception of their ability to effectively coach while under pressure. Coaches also reported improved ability to relax during competition ( $d = 0.64$ ), positive changes in self-confidence ( $d = 0.58$ ), and decreases in somatic anxiety ( $d = 0.58$ ). Though the sample size for this study was low, the results indicate that a wide range of psychological skills training could be beneficial for coaches, particularly those who coach in high pressure environments. Taken together, the two intervention studies described here show the potential that sport psychology services have to provide performance enhancement with coaches. The fields of both sport psychology and coaching could benefit from further exploration through studies such as these, particularly given the push to professionalize coaching as a field which could lead to increased stress and pressure to perform effectively.

### **The Professionalization of Coaching**

For an occupation to be classified as a ‘profession,’ certain criteria must be present. Cruess, Johnston, and Cruess, (2004) state that a ‘profession’ is based upon the mastery of a complex body of skills and knowledge which are used in the service of others. Furthermore, these authors contend that members of a ‘profession’ are governed by codes of ethics to which they profess a commitment to morality, integrity and competence for the promotion of the public good (Cruess et al., 2004). Finally, a ‘profession’ has a monopoly of use of its knowledge base, autonomy in practice, and self-regulation (Cruess et al., 2004).

A critical examination of the potential for the field of coaching to be deemed a ‘profession’ was conducted by Duffy et al. (2011) in a prominent position paper. These authors conclude that, globally, in its current state, coaching does not meet the traditional requirements of a ‘profession’ due to its current position in categories such as purpose, knowledge base, organization, and ethics. That is, these categories are more complex and contextual than other professions. This is a sentiment shared by other authors (e.g., Maclean & Lorimer, 2016). Others have described the challenges with viewing coaching as a profession due to the overwhelming number of volunteer coaches in individual regions such as the UK (Taylor & Garrat, 2010), and throughout the world (Duffy et al., 2011). The very definition of a volunteer coach infers the unpaid nature of such a position which is at odds with professionalization – a notion which is linked to pay for skilled (i.e., educated) services. However, a volunteer coach can take many forms and some volunteer coaches could be considered skilled practitioners, regardless of pay status. For this reason, coaching has been labelled by some as a ‘blended profession’ in which there is a majority of unpaid (volunteer) coaches but still a substantial number of part-time paid and full-time paid coaches (ICCE, 2013), all of who could benefit from a clearer professional

structure. Currently, there are certain international sport federations (e.g., FIFA, World Rugby) which have created a more professional framework through creating structures to support education and tiered qualification of coaches, however, these vary in the target audience (Duffy et al., 2011).

Regardless of the varied audiences international federations target, having a number of sport systems which emphasize a tiered accreditation for sport coaching in different contexts is important for pushing the field of coaching towards professionalization because, much akin to teaching, a profession cannot ethically exist without specific, structured training and supervised experience. A variety of organizations and conferences have been established over the past decade to aid in the development of coaching as a profession with specific training needs. An important organization that has largely contributed to the push forward into professionalization for sport coaching globally is the International Council for Coaching Excellence (ICCE; formally the International Council for Coach Education), established in 1997. The mission of the ICCE is to develop sport coaching globally and to enhance the quality of coaching at all levels of sport (ICCE, n.d.). As an international organization, the ICCE has grown to represent over 30 countries and has created two important documents that help to move the field of coaching towards professionalization. The first document is the International Sport Coaching Framework (ISCF; ICCE, 2013) which provides detailed information about coaching competences and pathways to moving through the varied levels of coaching in different contexts (see Appendix B for diagrams). The second document is the International Coach Developers Framework (ICDF; ICCE, 2014) which provides a model for those who will train and aid in the development of competent and effective coaches. Similar to the ISCF, this document details information about coach developer competences and pathways to moving through the different levels of coach

developers (see Appendix C for diagrams). Both of these documents target coaches and coach developers at different levels of experience and expertise. The ICCE also holds a global conference every two years to provide a forum through which cultivation of coaching as a professional field can continue and knowledge in the field can be better structured.

The ISCF is a document that details a general set of functions and knowledges that coaches at different levels and contexts need in order to be effective. The six primary functions for any coach includes setting vision and strategy, shaping the environment, building relationships, conducting practices and preparing for competitions, reading and reacting to the ‘field’, and learning and reflecting on their practice (ICCE, 2013). These functions reflect the functional competence a coach needs and in order to reach this functional competence, a coach must be able to demonstrate task-related competence in each of the six primary functions. The ICCE emphasize that the task-related competences should be embedded into basic qualifications for coaches and be underpinned by the three major knowledge areas needed by coaches – professional (i.e., sport-specific and related content and how to teach it), interpersonal (i.e., connecting with people), and intrapersonal (i.e., self-awareness and reflection) knowledge (ICCE, 2013). It is also important to note that the task-related competences expected of coaches increase in both number and responsibility as the level of coach within each context increases.

Given the varied pathways to becoming a coach, acknowledging the different ways that coaches may develop the varied types of knowledge and learn how to fulfil the competences within each function is important. From an international perspective, there are countries that have traditionally educated coaches through governing bodies of sport and national sporting organizations, while others have traditionally educated coaches through higher education (i.e., college degrees; ICCE, 2016). However, with the recent attempts to advance the field of

coaching towards professionalization, more countries are providing opportunities for a mixed model of coach education where a variety of organizations and institutions at different levels offer opportunities for coaches to develop the knowledge and experience to become competent practitioners (ICCE, 2016).

Another influential and informational document by the ICCE (2016) outlines specific standards for how the functions, competences, and knowledge types may fit into undergraduate degree programs in sport coaching around the world. Within the section discussing the underpinning knowledge types, sport psychology is included within two sub-domains of professional knowledge, for example, being able to use sport psychology principles to facilitate athlete performance. This inclusion of sport psychology for professional knowledge shows that the field of coaching does find sport psychology principles important for successful coaching of athletes. Perhaps the next development could be a document outlining how coaches can more specifically develop their own interpersonal and intrapersonal knowledge and how sport psychology could contribute to those knowledges.

In an effort to develop the three knowledge types and fulfil the competences required to be an effective coach, it is recognized that coach education and development must support the founding of effective skills, attitudes and behaviors, and not simply the accumulation of knowledge (ICCE, 2013). To develop effective skills, attitudes, behaviors, and knowledge, the unique learning needs of coaches in their specific contexts must be taken into account. Learning occurs in varied environments – through mediated forums such as formal education (i.e., a college degree) and non-formal education (i.e., clinics or seminars), through informal learning (i.e., self-directed resource finding), and through experiential learning environments which can be both mediated or unmediated (i.e., intentional learning through practical experience using

self-awareness and self-reflection; ICCE, 2013). Within the ISCF (ICCE, 2013), it is suggested that a blend of learning environments that include both mediated and unmediated learning opportunities will lead to effective coach development. An examination of literature that has focused on evaluating coach education and training prior to the ISCF reinforces this need for a variety of learning environments. For example, Cushion, Armour and Jones (2003) critically examined coach education in the UK and expressed the need for coach education to expand beyond content knowledge and recognize the complex and idiosyncratic nature of the coaching process. Aligned with this recognition, Cushion et al. (2003) also affirmed that within the field of coaching, learning seems to occur more through experience and mentoring in practical coaching situations (i.e., more informal environments) than formal learning environments such as a college classroom where content knowledge (such as technical, tactical, and bio-scientific information) is often learned (Cassidy, Jones & Potrac, 2004). In agreement with this view, coaches themselves typically hold less value towards formal education (Gould, Giannini, Krane & Hodge, 1990; Mallet, 2010; Nash & Sproule, 2009).

However, others have espoused the importance of not disregarding formal education for coaches, particularly with the effort to professionalize the field of coaching. Mallett, Trudel, Lyle, and Rynne (2009) describe the possible strengths and limitations of both formal and informal learning for coaches. Though they also regard informal, experiential learning as highly important for a coach's authentic and contextual learning, they balance their position with a discussion of the strengths of formal learning which include quality assurance, recognition of achievement, and development of critical thinking skills which are often lacking in informal learning environments (Mallet et al., 2009). A number of coaches themselves have expressed that the usefulness of formal education can be limited if courses are prescriptive and rigid but more

useful if open and discursive (Piggot, 2012). This notion of more open and discursive formal training has shown to be effective in other studies and programs such as Smith and colleagues' coach effectiveness training (Smith, Smoll & Barnett, 1995; Smoll & Smith, 2006) which focuses on flexibility and adaptability in the coaching process. The arguments for different learning environments indicate that coach learning occurs in various types of learning environments from formal to informal and that all types of learning are important for development of an effective coach.

Furthermore, the learning needs and developmental level of coaches may differ depending on the context in which they work (Cushion et al., 2010). For example, large scale formal coach education/accreditation programs can be ineffective in meeting the needs of coaches from a high performance/elite context (Lyle, 2002; Trudel, Gilbert & Werthner, 2009) as they are often structured to hold the interest of volunteer coaches – requiring few entry standards and delivered over short periods of time (Mallet et al., 2009). It is important, then, to examine in detail the high performance context to better understand the state of coach development and education at this level.

### **High Performance Coaching**

High performance sport is a global phenomenon with 206 nations competing in the latest Rio 2016 Summer Olympics (IOC Annual Report, 2016) and the 2014 FIFA World Cup Brazil reporting 204 countries that competed for 32 spots in the competition (FIFA website, n.d.). Sport organizations such as these (IOC and FIFA) as well as others (e.g., National Football League; NFL, International Federation of Tennis; IFL), yield a great deal of power in the world (Thibault, 2009) with lucrative television contracts, establishment of large sport institutes, and

commercialization of athlete and sport apparel globally. It is the high monetary stakes, as well as the advancement of sport science knowledge, that are driving the recent push for better prepared, knowledgeable, and competent professionals in coaching. However, while there is a push for the professionalization and development of greater support for coaching, the reality of the current coaching climate, in particular in high performance which is typically the most associated with the developing professionalization of the field of coaching (Rynne et al., 2017), remains one of scarce support and ever-increasing stressors.

High performance has been described as a dynamic and “volatile” climate (Hill & Sotiriadou, 2016) which requires one to develop evidence-based and systematic performance programs, exhibit a high level of commitment and interaction with athletes, engage in highly formalized competition structures, and to complete these tasks within specific contextual constraints (Rynne et al., 2017). Given this list of expectations of coaches within the high performance context, it is evident that coaches must manage a number of roles that bridge physical, technical, and psychological challenges (Thelwell, Weston, Greenlees & Hutchings, 2008). During this process, coaches face many of the same stressors that their athletes face in the sporting environment, including coping with stress (Didymus, 2017), job insecurity (Wagstaff, Gilmore & Thelwell, 2015), managing personal recovery (Thelwell et al., 2008), long working hours (Knight, Reade, Selzler, & Rodgers, 2013), time and resource constraints, and public pressure to perform (Altfeld, Mallett & Kellman, 2015). If coaching is to progress into a profession, it is clear that coaches are in need of education, professional development and support that helps them to develop the skills to manage a high pressure, dynamic and at times volatile environment.



Arguably, high performance coaches could be comparable to experts in other fields who work in high pressure environments as these coaches typically engage in complex decision-making tasks requiring data collection, analysis and management, and coordinated interaction with a range of personnel (Mallett, 2010). Though there are thousands of well-compensated, high performance coaches throughout the world, the pathway to becoming a successful high performance coach is varied and individualized. It is also important to note that many of the studies examining pathways to high performance (discussed in detail below) were conducted prior to the recent professionalization movement and as such, coaches within these studies worked within a system that was highly individualized based on their sport. Some coaches may have had to figure out their own path to development given the previously limited structure of many sport organizations for coach development.

A number of studies have been conducted to examine the career development of high performance coaches (which authors often synonymize with expert or elite coaches), however, there is little consensus on experiences that have been shown to lead to high performance coaching. Erickson, Cote, and Fraser-Thomas (2007) examined experiences, milestones and educational activities associated with becoming a high performance coach in the current system and they concluded that commonalities amongst the nineteen coaches included playing the sport they now coached, prior leadership experience as an athlete (if they played a team sport), many hours of prior coaching experience, and some formal training or mentoring. Nash and Sproule (2009) also examined career development of nine high performance coaches and results indicated that their coaches' main methods of development were informal, with networking and mentoring with other coaches being essential to their progress. The coaches from Nash and Sproule's study also raised questions regarding the value of coach education, believing that it

was not sufficient in recognizing how coaches develop and expand their knowledge for the high performance context despite the various changes and restructuring that coach education has undergone in recent years. It seems that, even in the high performance context, many coaches highly value informal learning through experience and interactions with other coaches over formal learning environments. It is possible, though, that these coaches did not have access to quality formal education programs prior to their current positions due to the lack of structure in some sporting bodies.

In contrast to the coaches in Nash and Sproule's study, high performance coaches in a study by Williams and Kendall (2007) stated that experience in coaching alone is not sufficient for coaching high performance athletes and that high performance coaches need sufficient knowledge to be able to read sports science journals to incorporate research-based knowledge into their practice. Though not advocating strictly for formal learning, these coaches at least indicate the important process of gaining research-based knowledge in a more formal way. These differing views reflect the idiosyncratic ways that high performance coaches develop their craft (Werthner & Trudel, 2009), a reflection that is problematic for the professionalization of coaching (Mallett, Rynne, & Dickens, 2013) due to its unstructured nature.

With a range of different experiences and pathways leading coaches to the high performance environment, a closer examination of coach education in the high performance context is warranted to determine how such structure may contribute to coach effectiveness and raising the standards of coaching practice that can potentially aid in the professionalization of the field (Nelson, Cushion & Potrac, 2013). Callary, Culver, Werthner and Bales (2014) sought to examine the current state of high performance coach education programs in seven different countries (Canada, Germany, France, Switzerland, Norway, Netherlands, and New Zealand) to

gauge the global state of coach education and determine whether or not these programs are implementing alternative learning approaches such as mentoring and critical reflection.

Alternative learning approaches have been proposed by a number of authors to help integrate theory and practice thereby improving the quality and applicability of coach education (Armour, 2010; Cushion, Armour & Jones, 2003). Callary et al. (2014) reported that all seven high performance coach education programs integrated experiential learning opportunities through internships coupled with mentorship, reflective processes, and communities of practice. Callary and colleagues conclude that, despite many large-scale coach education programs receiving criticism for lacking relevance to coaching by failing to link theory and practice for coaches, these criticisms do not seem to apply to the seven high performance coach education programs examined in their study.

In addition, all programs but one (New Zealand) provided an official qualification diploma following completion of the program. The results reported by Callary et al. (2014) are encouraging as they suggest that the realm of high performance coaching is changing to reflect a more professional field where formal qualification is a prerequisite for entry and continuing professional development is essential for maintaining effectiveness in the high performance environment.

However, while some countries (often the Eurocentric regions) have coach education and development programs that are changing to reflect a greater value of coaching quality and effectiveness, other countries such as Brazil exhibit inadequate focus on developing quality coach education and development for their high performance coaches. Mazzei and colleagues (2015) conducted a study to examine the structure and policies associated with high performance sport in Brazil in comparison with other nations from Europe, Asia and Australasia. Results

showed that Brazil has a higher investment of financial resources with a rating of 64% compared to the average of 47% of other nations. However, these resources have been directed more towards participation in events and in technical sport preparation of athletes, rather than coach development and support which showed a rating of 24%, less than half of the average of other countries (54%). This finding is interesting because, in order to be in the coaching profession in Brazil, one must have completed an undergraduate degree in physical education and sport and participate often in updated courses provided by the Brazilian Olympic Committee and sport federations. With such a formalized structure for training, it would not be unusual to infer that education and development of coaches is highly valued in this country. As it is, Mazzei et al. (2015) posited that, although education is formalized for coaching in Brazil, the quality of the education and training is not comparable to other nations due to a lack of consistent and comprehensive evaluation of the education of coaches. It has been argued that evaluation and revision of formal coach education is important for the enhancement of coach development and learning (Cushion et al., 2010) and, therefore, without such evaluation, evolution towards greater quality of education and learning for coaches will be difficult to achieve.

Much alike Brazil, high performance coach education in Portugal has been critically examined. Findings indicated that coaches were dissatisfied with the dominant coach education framework used in Portugal which remains didactic and classroom-based, leading to chiefly formal teaching techniques that disregard individual needs (Mesquita, Ribeiro, Santos & Morgan, 2014). The formal, classroom-based education environment tends to limit the space and time for reflection – an activity that Lyle (2002) argues is pertinent in pedagogical environments where practice is applied, contextualized, and complex, and in which learning, therefore, requires a great degree of introspection. Knowles, Borrie, and Telfer (2005) share Lyle's view and

emphasize that coach educators need to move past traditional education structures and processes to embrace what is already recognized by other professions – that reflection is a skill that needs to be actively developed in order to maximize learning.

In a study that examined coaches' views about effective coach education, one important finding showed that coaches identified effective coach education as having a strong emphasis on reflective practice (Nelson et al., 2013). Others have advocated for coach education programs that assist coaches to also enhance their skills at developing effective relationships with others (Jowett & Cockerill, 2003) and to develop the psychological skills needed to coach effectively under pressure (i.e., perform effectively; Olusoga et al., 2014) because even many Eurocentric programs do not include these aspects. Facilitating reflection, developing skills that facilitate effective relationships, and developing psychological skills that help high performance coaches manage stressors in their environment are skills that are within the wheelhouse of sport psychology and that consultants often facilitate with their clientele. While a number of coach education programs do include sport psychology as components to the programming, the focus is typically on how to use sport psychology skills to facilitate athlete performance. This athlete-focus mirrors the traditional focus of the field of sport psychology itself which has emphasized applied work with athletes and currently has a general lack of knowledge and application of skills for coaches to use in their own development of performance.

Furthermore, it is currently unknown how, or if, high performance coach education addresses or conceptualizes the coach as a performer in their own right and how to manage that role. Even as far back as 1990, high performance coaches, themselves, have valued the role of sport psychology in their success as a coach as participants in Gould et al.'s (1990) study examining the educational needs of high performance coaches indicated knowledge of sport

psychology as important to their development as a high performance coach. Furthermore, these coaches rated sport psychology (and physiology) as the most important course topics that would be useful to future high performance coaches' development. Olusoga et al. (2014) emphasize that it may be the job of national governing bodies (NGBs) and other sport organizations to encourage coaches to view themselves as performers and to prepare for the rigors of their own performance. Furthermore, a number of authors suggest the role of NGBs and sport organizations should include ensuring that the psychological support and development for their coaches is embedded within their coach education programs (Lara-Bercial & Mallet, 2016; Mallet & Lara-Bercial, 2016; Olusoga et al., 2014).

### **Future Research Integrating Sport Psychology with High Performance Coaches**

This literature review has explored the backgrounds of sport psychology and the field of coaching to determine where connection to these two fields is for performance enhancement of coaches. We know that the traditional view of applied sport psychology work is helping athletes to enhance their performance. Research that has examined coach attitudes towards sport psychology services has reinforced the coach role as a facilitator and gatekeeper for their athletes and the concept that coaches may hold dual roles as facilitator for their athletes' performance and as a performer in their own right is foreign to many. Despite the increasing push for the professionalization of coaching and the need for continually improving coaching quality, competence and effectiveness, many of the more learning integrative coach education programs for high performance coaches are in Eurocentric nations while focus on high performance coaches in non-Eurocentric nations tends to be conducted in less integrative learning formats. Furthermore, though most high performance coach education programs are directly focusing on a coach's performance by educating them on how to coach better, they typically do not emphasize

the skills needed to manage stress and make effective decisions under pressure and many programs limit integration of sport psychology education into the programs. These deficits are problematic because they show a failure to acknowledge, understand, and address how the stressors and concerns faced by those in the high performance environment can affect their coaching performance, which, in turn, may inhibit coaching effectiveness.

To address gaps in the literature and to help move the field of applied sport psychology forward, further research is needed in a number of areas. There is a need to explore further how sport psychology services can be useful and effective in helping high performance coaches with their performance needs. In particular, examining high performance coaches' current knowledge and utilization of sport psychology for their own performance could be a good starting point as previous research has suggested that coaches who have more knowledge of sport psychology are more likely to have a positive attitude towards using the services of an SPC. Such a study would best be conducted through qualitative methodology, such as interviews, in order to gain rich information that can inform SPC practice. Case studies could also be useful given the relatively small amount of literature that currently exists in this area and the need for greater depth of knowledge that case studies can provide. Using a case study methodology allows for exploration of a phenomenon through a variety of lens which allows for multiple facets of the phenomenon to be understood (Baxter & Jack, 2008). This methodology also acknowledges the importance of contextual conditions that may be relevant to the phenomenon (Baxter & Jack, 2008), for example, the context of high performance coaching and/or the cultural context of different countries where one may live and coach. Further research to explore the usefulness of sport psychology services could include conducting bigger intervention studies with a larger number of participants to increase generalizability of findings. These interventions should teach a wider

range of psychological skills to the coaches that could address their own stressors, and could include skills such as emotion regulation, stress management, and personal goal setting.

Interventions such as these could be conducted with coaches when working in different contexts (e.g., youth, high school, collegiate) and part-time paid coaches could be compared to full-time paid coaches to determine if differences in environmental stress levels affect intervention effectiveness. In particular, there is a dearth of data in the published literature on coaches who work at the highest levels of sport (e.g., professional, Olympic, national).

In particular, application of reflection with coaches, interactive skills for developing effective relationships, and psychological skills for coaching in high pressure environments could be important skills to teach these coaches. Additional research could critically examine current coach education programs across Eurocentric and non-Eurocentric nations to identify possible entry points for sport psychology principles that may align with curriculum content. Comparison across nations of such research could help to identify important cultural differences in the provision of coach education and the strength of the link between sport psychology principles and curriculum content.



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APPENDIX B

**ISCF Figures**

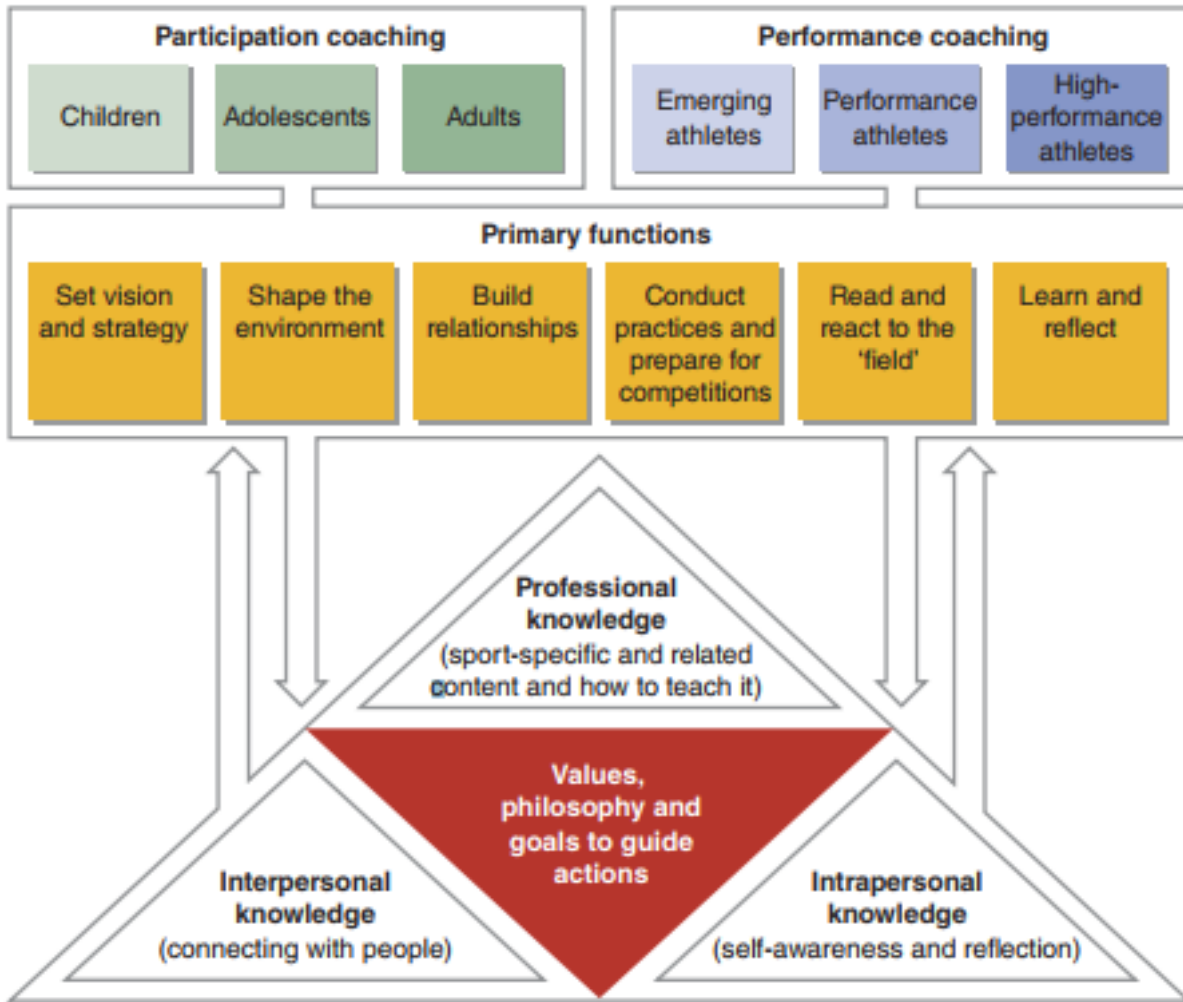


Figure 2. Functional coaching competence and coaching knowledge from ISCF.

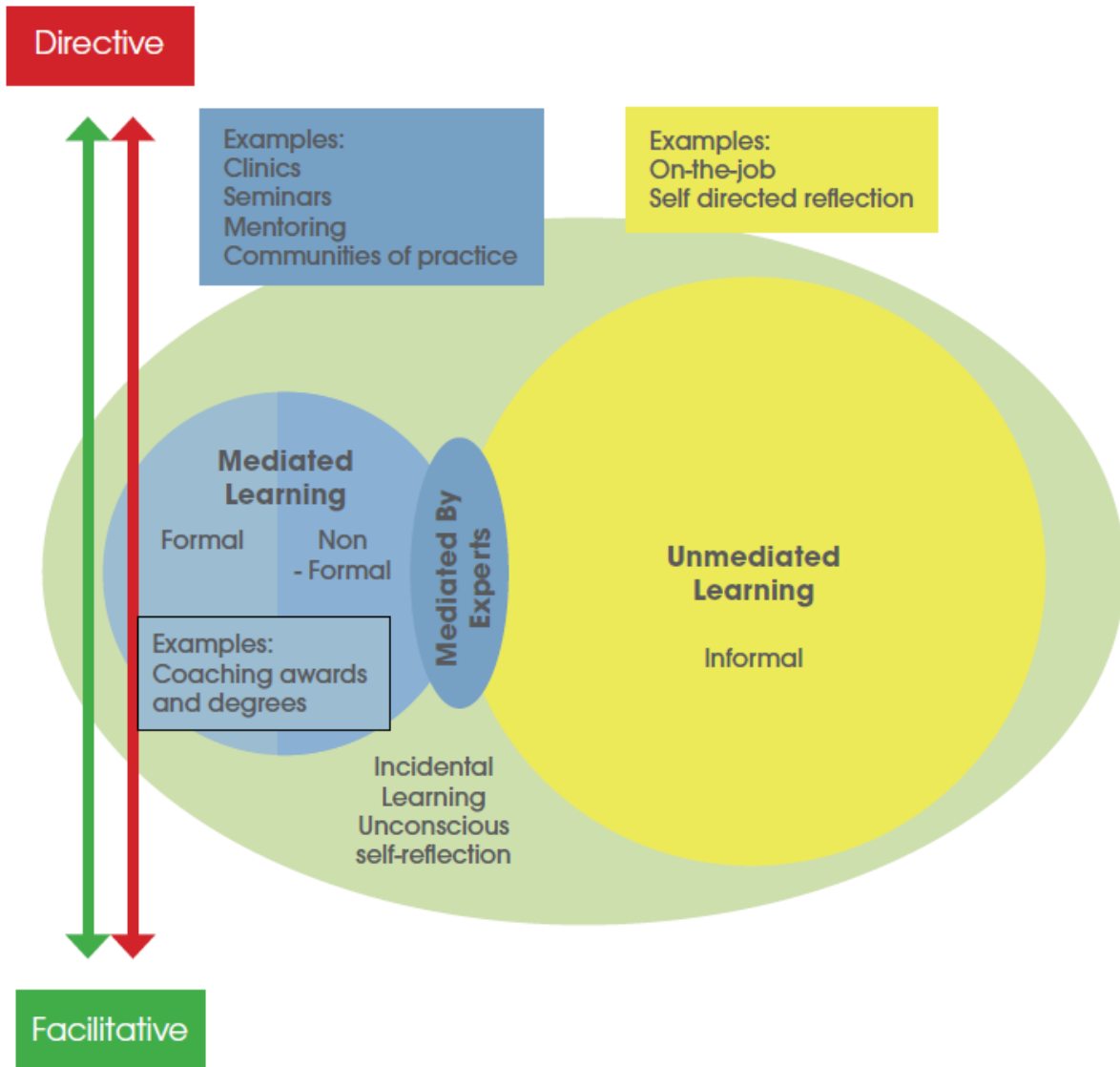


Figure 3. Types of learning situations for coaches.

APPENDIX C

**ICDF Figures**

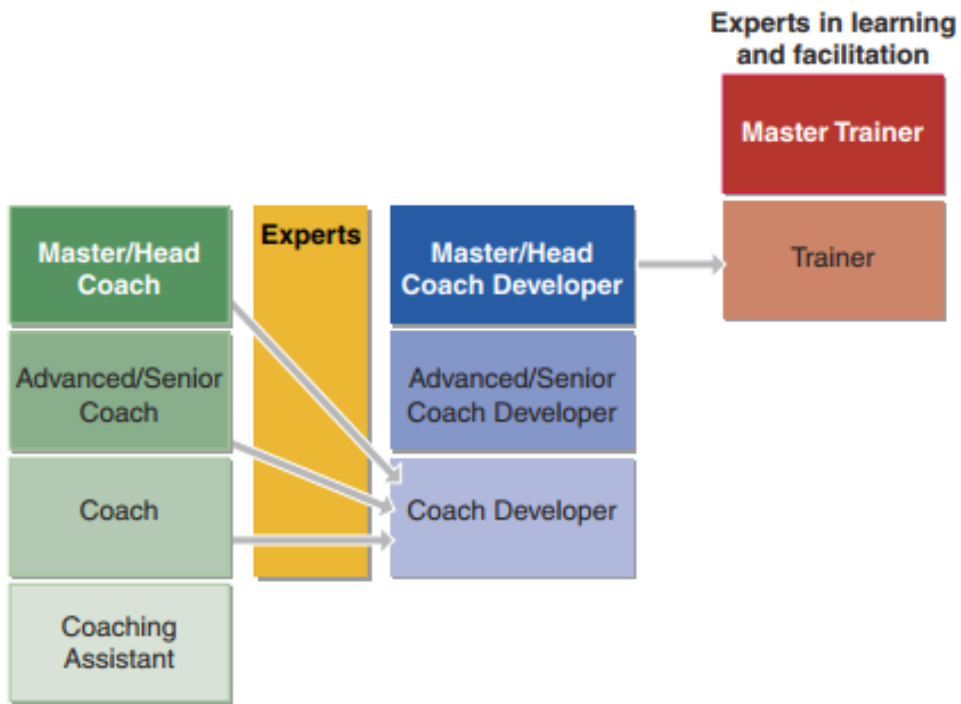


Figure 4. Coach, coach developer and trainer pathways.

Descriptor	Coach developers	Senior coach developers	Master coach developers	Trainers
		have successfully completed initial training and orientation	are effective and experienced coach developers	are highly effective and experienced senior coach developers
Role	<ul style="list-style-type: none"> <li>• facilitate formal learning situations through prescribed coach education programmes with minimal customisation</li> <li>• assess coaches</li> <li>• provide leadership and engage in personal development opportunities</li> </ul>	<ul style="list-style-type: none"> <li>• customise and facilitate coach education programmes and sessions</li> <li>• co-deliver and support coach developers</li> <li>• assess coaches</li> <li>• provide leadership and engage in personal development opportunities</li> </ul>	<ul style="list-style-type: none"> <li>• provide initial training for coach developers</li> <li>• support senior coach developers and coach developers through mentoring, co-delivery and feedback</li> <li>• design sport-specific coach education programmes</li> <li>• quality assure their own sport-specific programmes</li> <li>• assess coaches and coach developers</li> </ul>	<ul style="list-style-type: none"> <li>• provide leadership, quality assurance and verification of coach development and education programmes</li> <li>• design and lead coach developer programmes and professional development opportunities</li> <li>• select, assess and support senior and master coach developers</li> <li>• establish, monitor and evaluate coach developer systems</li> </ul>

Figure 5. Overview of coach developer roles based on level.

APPENDIX D

**Semi-structured Interview Guide**



## Semi-structured Interview Guide

### ***Introduction:***

- Welcome and thank the participant
- My primary interest in this interview is to better understand your thoughts and feelings about your experiences of using sport psychology services for your own needs. Specifically, I am interested in your experience of physical challenges to participation and any psychological, social, or physical outcomes you may have experienced.
- Procedure: I am here to learn from you. I will ask certain questions, but I encourage you to include anything you feel is relevant. There are no right or wrong answers to these questions; I just want to better understand your perspective.
- I am going to be audio recording our discussion. The recordings and transcripts of the conversation are confidential, as outlined in the consent form. Information and quotations will be used in publications and presentations of this research, but your name and any other information that could identify you will be removed from such data.
- You have the right to choose not to answer any particular question or to end the interview at any point if you wish.
- Are there any questions before we begin?
- (Start the tape)
- To reiterate, can you please confirm that you consent to participation in this study?

### ***Questions:***

#### Part 1: Background information and rapport building

1. How do you assess or measure your own performance as a coach?
  - a. Why do you believe this is important to do?
    - How has your assessment changed over time?
  - b. What do you believe has influenced your perception of successful performance as a coach?
    - Culture?
    - Upbringing?
    - Peers?
    - Context of coaching?

#### Part 2: Main research questions

1. What led you to engage in sport psychology services personally?
  - a. What factors contributed to your decision to work with an SPC for your own performance needs?
  - b. How did you come into contact with your SPC?
    - Knew them in a previous context?
    - Used them with your own team?

- Suggestions/advice from other coaches or professionals?
  - Found information online or through other media?
  - Other?
- c. What qualifications did your SPC have?
- Were these important to you?
- d. What kind of support did you receive from others for engaging in these services? From who?
- Organizational?
  - Staff?
  - Athletes?
  - Mentors?
  - Family/friends?

Is receiving support from others for using an SPC personally important to you? If so, why?

- e. What was your previous knowledge and/or experience with sport psychology prior to your own performance work with one?
- Knowledge:
- Within educational forums (i.e., training, coach education)?
  - Informally through interaction with other coaches?
  - Informally through discussions with other professionals?
  - Reading texts/articles?
- Experience:
- As an athlete yourself?
  - Brought on to work with your athletes?
  - Positive experiences? Negative experiences?
2. What kind of performance needs did you address with your SPC?
- a. How did you feel working with an SPC on these needs?
- Confident? Unsure? Ambivalent? Excited? Doubtful?
- b. How effective did you find the SPC in helping you with these needs?
- c. What was the method/s of contact between you and the SPC? How frequent was contact?

- d. What skills/interventions have you learned/used and found to be most helpful? Least helpful?
    - Why do you think that is?
  - e. What other needs do you perceive high performance coaches may have that an SPC could help with?
    - Why do you think an SPC would be helpful with those needs?
3. What barriers/challenges did you face in using these services for your own performance needs?
- a. How did others perceive your use of an SPC for your own performance needs? Any negative reactions? Stigma?
    - If so, why do you think that is? What was that experience like for you?
  - b. How was the process of finding/beginning to work with an SPC?
  - c. Can you describe any specific examples of a barrier that you overcame?
    - How were you able to overcome it?
    - Were there any you were not able to overcome?
  - d. What advice would you give to other coaches who are considering using SP services for their own coaching performance?
4. Do you have anything else you would like to add that has been important for you about your experience working personally with an SPC?

**Thank-You:**

Thank-you very much for your participation in this project. I appreciate you taking the time and effort to complete this interview for my study.

General Probes to be used:

- Can you tell me more about that?
- Could you give me an example of what you mean?
- Can you describe what you mean?
- Please elaborate on that idea.
- Could you explain that further?