

**University of Birmingham**

---

**From the Selected Works of Jennifer Cumming**

---

2011

# Psychological Qualities of Elite Adolescent Rugby Players: Parents, Coaches, and Sport Administration Staff Perceptions and Supporting Roles

Charlotte Woodcock, *University of Birmingham*

Mark J. G. Holland, *University of Birmingham*

Joan L. Duda, *University of Birmingham*

Jennifer Cumming, *University of Birmingham*



Available at: [https://works.bepress.com/jennifer\\_cumming/21/](https://works.bepress.com/jennifer_cumming/21/)

# Psychological Qualities of Elite Adolescent Rugby Players: Parents, Coaches, and Sport Administration Staff Perceptions and Supporting Roles

**Charlotte Woodcock, Mark J.G. Holland,  
Joan L. Duda, and Jennifer Cumming**

University of Birmingham

The aim of the current study was to extend previous research by Holland and colleagues (2010) into the required psychological qualities of young talented rugby players by considering the perceptions and supportive role of influential others. Perceptions of players' parents ( $n = 17$ ), coaches ( $n = 7$ ), and sport administration staff (SAS;  $n = 2$ ) were explored through focus group discussions. Findings show that these influential others considered the same 11 higher order themes for psychological qualities previously identified as desirable by players. Their views on how they assisted in developing these player psychological qualities were classified into three higher-order themes, namely progressive development, professional environment, and performance environment. Specific behaviors contributing to each context and deemed helpful by influential others were discussed in terms of ecological systems theory (Bronfenbrenner, 1977). Recommendations for future research and applied implications for consultants are subsequently offered.

At the highest level of sport, performance success is consistently differentiated by an athlete's display of psychological qualities and effective use of mental techniques (Gould, Eklund, & Jackson, 1992). A number of in-depth qualitative studies have explored these psychological determinants of sporting success through interviews and questionnaires with performers at the pinnacle of their careers including Olympic and World Champions (Durand-Bush & Salmela, 2002; Gould, Dieffenbach, & Moffett, 2002; Orlick & Partington, 1988). Recollections made by elite athletes about the development of these psychological attributes and related mental techniques have furthered our understanding of the psychological dimensions of optimal performance. However, the accuracy of such self-reports are threatened by memory-decay over time. Current knowledge, beliefs, and expectations can distort memories and errors in retrieval can lead to biases in recall (Schacter, 1999). Although athletes have not indicated difficulties in recollecting meaningful

events such as the Olympics (e.g., Gould, Guinan, Greenleaf, Medbery, & Peterson, 1999), in general reporting errors increase with the passage of time. More recent occurrences are recollected with a greater degree of accuracy than distant events where details are forgotten or become blurred leading to incomplete or inaccurate reports (Beckett, Da Vanzo, Sastry, Panis, & Peterson, 2001). This methodological shortcoming has therefore limited the extent psychological characteristics and their development in young talented athletes has been accurately accessed and described.

To address this gap in the literature, research by Holt and Dunn (2004) targeted *young* talented athletes to minimize length of recall required when examining critical factors contributing to talent development. Canadian ( $N = 20$ ) and English ( $N = 14$ ) elite adolescent soccer players participating in youth academies attached to a professional team or competing at an international level, were interviewed. A grounded theory of competencies and environmental conditions necessary for progression in the sport was proposed. Findings suggested athletes who are disciplined, committed to career goals, resilient in the face of obstacles, and harness family support, are more likely to succeed professionally.

Similarly, Holland, Woodcock, Cumming, and Duda (2010) examined the psychological characteristics relevant to elite 14 and 15 year old rugby union players in the UK. Côté's (1999) Developmental Model of Sport Participation (DMSP) located these rugby players in their specializing years. A time when athletes concentrate on only one or two sports, the specializing stage demands a disciplined focus toward technical skill development while enjoyment remains a central feature of an overall positive sporting experience (Côté, 1999). In line with Côté's conceptualization, the young rugby players indicated that having a persistent determination to improve, while still enjoying sport participation, was crucial for sporting success at this particular developmental stage. Holland and associates found nine further qualities perceived crucial for elite youth rugby participation. Following inductive analysis to reflect the athletes' perspectives, the qualities of confidence, having an appropriate attentional focus, game sense, and mental toughness were deemed pertinent. These characteristics are consonant with perceptions held by elite adult populations (e.g., Durand-Bush & Salmela, 2002; Gould et al., 2002). Qualities specific to elite adolescent rugby players also emerged however, including being able to adapt to new environments, being a self aware (and self-referenced) learner, and taking responsibility for one's athletic development.

In their work, Holland et al. (2010) extended conceptual recommendations made by Vealey (1988). Vealey highlighted the importance of distinguishing between psychological skills and methods. Skills were considered as qualities to be attained (e.g., having confidence), whereas methods were techniques adopted by athletes to develop desired skills (e.g., positive self-talk). For Holland and colleagues, the concepts of skills and qualities were not synonymous. Specifically, skills were deemed to represent a regulatory capability such as an athlete's ability to facilitate and maintain levels of confidence. The consequence of having confidence resulting from these skills was considered a quality and defined as "characteristics displayed by athletes that facilitate optimal performance" (Holland et al., 2010, p. 20). These qualities may be experienced at differing levels (e.g., high and low self-confidence), and are psychological attributes that can be influenced through the employment of specific techniques (e.g., positive self-talk). The present study focuses on psychological qualities considered relevant in youth elite rugby, and

how other influential groups surrounding the young developing athlete perceive their role in facilitating progression in these desired qualities.

To further understand the optimal development of psychological qualities in young elite competitors, research needs to extend beyond the athlete to the systems within which they operate. It is well documented that the developmental journeys of youth athletes are influenced by significant others and social environmental factors (Baker, Horton, Robertson-Wilson, & Wall, 2003; Bloom, 1985; Strachen, Côté, & Deakin, 2009). To understand the nature of these influences, theoretical frameworks from developmental psychology have been adopted such as Bronfenbrenner's (1977, 1999) ecological systems theory (e.g., Holt, Tamminen, Black, Mandigo, & Fox, 2009; Holt, Tamminen, Black, Sehn, & Wall, 2008). Briefly, Bronfenbrenner (1999) proposes that youth development depends on interactions within and between nested systems. The individual is embedded within multiple microsystems that involve increasingly more complex reciprocal interactions with significant others. To impact youth development, these exchanges (also known as proximal processes) must regularly occur over extended periods of time (Bronfenbrenner & Morris, 1998). In sport, microsystems have been considered within family and team contexts, in particular the influential roles of parents and coaches (Fraser-Thomas, Côté, & Deakin, 2005).

In elite adolescent athlete development studies, parental support typically encompasses emotional, informational, and tangible backing via the provision of empathy, previous sporting experience, and transport and financial assistance (Côté, 1999; Holt & Dunn, 2004). In a retrospective study conducted by Lauer, Gould, Roman, and Pierce (2010b) with players, coaches and parents, parents emphasized life skills and helping their child find a balance between sport and other commitments. However athlete-parent interactions are not always positive and negative influences can be witnessed during the specializing years. Within the family microsystem, undesirable behaviors include being critical, over-pushing, over-emphasizing winning, being emotionally insensitive, and authoritative. Conversely, less controlling parenting styles that are consistent over time correspond to a healthy and positive parent-child relationship during athletic development (Holt et al., 2009; Lauer, Gould, Roman, & Pierce, 2010a; Lauer et al., 2010b).

As with parents, coach interactions can be both positive and negative for the developing athlete. Coaches help athletes during the specializing years to focus on the process of systematic practice and promote sport specific development (Baker et al., 2003). During this period, coach-athlete interactions influence athletes' self-beliefs and motivation orientations (Conroy & Coatsworth, 2007; Duda & Balaguer, 2007).

Given the observed positive and negative effects parent and coach interactions have on athletes, further research is required to examine their respective impacts. In particular, the nature of support provided by parents and coaches in fostering desired psychological qualities in young players warrants investigation considering the reported significance of these qualities for optimal athletic development (e.g., Gould et al., 2002; Holland et al., 2010; Holt & Dunn, 2004).

Research to date has shed some light on psychological skill support and suggests it is important for athletes and significant others to be on the "same page" and understand each other's needs, wants, and desires (Butler, Smith, & Irwin, 1993). Findings from a handful of studies examining congruence between player and

coach perceptions of mental training needs (Grove & Hanrahan, 1988), effectiveness of specific mental techniques (Vargas-Tonsing, Myers, & Feltz, 2004), and mental skill use (Leslie-Toogood & Martin, 2003) suggest variability in the degree of alignment in viewpoints. Where instances of incompatible perceptions occur, athletes' psychological needs are at risk for not being met and poorer performances observed (Butler et al., 1993). When athletes and significant others are more congruent, the former's individual needs may be better supported to facilitate optimal athletic development. Therefore, there is a need to examine perspectives of all members of the athlete triad (i.e., athlete, coach, parent) on relevant psychological characteristics and how they are supported.

One aim of the current study was to address this limitation in the literature and extend previous research by Holland and colleagues (2010) on players' views of the psychological qualities relevant to elite adolescent rugby. Specifically, we compared these views with (a) the perspectives held by these players' coaches and parents, and (b) examined the role of these two significant other groups in supporting the reported desired outcomes.

Adopting an ecological systems framework as a general heuristic guide, the current study centers on individuals, interactions and contexts within athlete microsystems (i.e., parental and coach influence). However these microsystems are nested within, and also impacted by, more distal exosystems (Bronfenbrenner & Morris, 1998). In a sport context, an exosystem refers to a setting in which athletes do not actively participate within (e.g., sport administration), but where significant decisions are made that directly affect others within an athlete's microsystem setting (e.g., coaches). For sport administrators, the experiences of youth athletes are a primary concern (Scwab, Wells, & Arthur-Banning, 2010). For those sport administrators involved in talent development, these experiences include optimizing psychosocial factors and performance-related influences through organization and structuring of youth development programs, training of coaching staff, and identification of criteria for talent identification (Abbott & Collins, 2004). Thus, a second aim of the current study was to examine the perceptions of the required psychological qualities and their perceived role in promoting these qualities in the case of sport administration staff (SAS) in elite youth development rugby. By so doing, the present work strives to gain a more complete picture of the broader ecological system influences which may impact young talented athletes at the specializing developmental stage.

## Method

### Participants

To allow for a direct comparison with the Holland et al. (2010) study, the parents, coaches, and sport administration staff (SAS) of the elite adolescent rugby union players interviewed by Holland and colleagues made up a purposive sample ( $N = 26$ ).

One hundred percent of coaches and SAS who met the inclusion criteria of currently being involved with the players in a district level rugby development program from the previous Holland et al. (2010) study were recruited. Sixteen percent of parents of these same players agreed to participate in the current study.

## Procedure

The current study was conducted during the same month as the work of Holland and colleagues (2010) and influential others were interviewed within two weeks of players participating in this previous investigation. All participants agreed to take part in one of five focus group discussions, following receipt of an information letter explaining the purpose of the study. Briefly, two parent focus groups ( $n = 9$ ,  $n = 8$ ), two coach focus groups ( $n = 3$ ,  $n = 4$ ), and one SAS group discussion ( $n = 2$ ) were conducted. Kruger and Casey's (2000) recommendation for focus group size is between six and eight people, and should not exceed 10 individuals. These guidelines were followed when possible. However, in some cases group size was limited by participant availability, geographical location and consideration of occupation. In essence, the two administrators comprising the SAS focus group were the only ones directly responsible for the development of this elite group of young rugby players.

A priority for all groups was to achieve a balance of within group similarity and difference to facilitate an in-depth discussion with the opportunity for interaction and reevaluation (Kitzinger, 1994; Litoselliti, 2003). Specifically, parent focus groups were mixed across socioeconomic status inferred by school type attended by the players (e.g., private and state). Group one contained eight participants comprising of four fathers and two mothers and included one father and mother of the same player. The second parent focus group of nine individuals included seven fathers and two mothers. The two coach focus groups were comprised of all male coaches but mixed across coaching specialty. The first group contained one district level head coach, a forward coach, and a backs coach. The same personnel from a different rugby development district made up the second coach focus group. In addition to the three coaches in this second group, a physiotherapist, who was fully integrated into the team environment and coaching staff, provided an alternative perspective to an otherwise homogenous group. Finally, in terms of key sport administration staff (SAS), the Performance Development Manager who oversees the organization and running of district level programs and the Head of Player Development participated in this study. Ethical approval was granted by a university ethics committee and all participants signed an informed consent form.

Using a similar method to Holland et al. (2010) and following recommendations for focus group research (Litoselliti, 2003), discussions were conducted in a nonthreatening environment. All focus groups took place in a quiet meeting room located at either the training ground or accommodation facilities used by district level players. These venues were perceived to be familiar and comfortable environments for coaches and SAS, and a neutral location for all parents whose sons were involved in district level rugby. Discussions were facilitated by a moderator who had previous experience of conducting focus groups involving rugby players, knowledge of effective focus group practice (e.g., Kitzinger, 1994; Krueger & Casey, 2000), and a good understanding of the research topic (Litoselliti, 2003). Focus groups lasted between 45 and 90 min, and were audio and video recorded. Notable discussion points were recorded by an observer, who fed a summary of key points back to participants at the end of each discussion to check for understanding and allowed participants the opportunity to reflect and expand on comments made.

## Focus Group Guides

The moderator welcomed participants before giving a brief explanation of the study and purposes of the focus group. To help put participants at ease, and facilitate an honest and open discussion, it was reinforced that no right or wrong answers existed. Participants were informed that people often hold different points of view, and both positive and negative comments were encouraged.

General demographic questions were initially asked such as “Please introduce yourself to the group, state your coaching/administrative status, and your coaching/administrative experience in rugby”. For parents, this introductory discussion was prompted with the question “Please introduce yourself to the group, and briefly share a favorite experience of your child playing rugby”. After all participants had been given an opportunity to speak questions then led to the study’s focal points. A performance profiling procedure (Butler & Hardy, 1992) was followed to explore what participants perceived to be desired psychological qualities relevant for their children and players to successfully participate in under-16 district level rugby. Performance profiling procedures have successfully been used in the past to guide focus group discussions relating to necessary athlete psychological attributes (e.g., Holland et al., 2010; Jones, Hanton, & Connaughton, 2002). The present study followed the brainstorm, prioritization and defining phases, evident in the work of Holland and associates (2010), in identifying and exploring relevant psychological qualities.

Consistent with the questions posed to players by Holland et al. (2010), the brainstorming phase began with a broad question of “What are the ideal characteristics for a youth rugby player?” designed to facilitate contributions from all participants early in the session. All contributions during this brainstorm were noted down and put on display to serve as a reminder of what individuals had said. Following exchanges relating to all aspects of rugby performance, the discussion was focused onto ideal psychological qualities of under-16 district level rugby players following the probe, “What are the ideal mental characteristics that players display?” From the resulting discussion, a number of psychological qualities were elicited.

To allow for an in-depth exploration in the time allocated for the focus groups, only two to three key qualities from the brainstorming were prioritized for further discussion. Participants selected the characteristics perceived to be the most important for players. The moderator then led a discussion defining these characteristics in terms of how they are displayed by elite adolescent rugby players.

Finally, questions not previously put forward to players by Holland et al. (2010) were posed relating to each participant’s role in facilitating these qualities. Parents were asked, “In what ways do you support your child playing rugby?” while coaches were asked, “What mental skills training do you conduct when you coach rugby?” Finally, the SAS were asked, “What mental skills training is incorporated into your program?”

In each phase of the focus group discussion, the moderator used appropriate prompts and probes to facilitate an in-depth exchange. Furthermore, quieter individuals were specifically asked for their opinion to facilitate contributions from all participants. A copy of the interview guide for each focus group is available from the first author.

## Data Analysis

All focus groups were transcribed verbatim and analyzed using Nvivo (version 7) qualitative data analysis software. Transcripts were subject to content analysis following guidelines outlined by Côté, Salmela, Baria, and Russell (1993). Two coders analyzed the transcripts independently to allow for investigator triangulation of the data. Each coder read the transcripts with two central research questions in mind, “What psychological qualities are perceived relevant by these three groups of influential others for under-16 district level rugby players?” and “What were participants perceived role in fostering these psychological qualities?”

To make a meaningful comparison between the perceptions of players and their influential others, guidelines proposed by Sim (1998) were followed. Sim highlights that focus group research is not an oral survey, and warns against frequency counts as a basis of comparison between groups. Sim also notes that the strength with which views are articulated may simply reflect group dynamics and not be indicative of underlying attitudes. He further argues that attempts to quantify strength of opinion are ill advised. Rather, consistencies and disparities between groups should be made based on whether a term or view was raised (or not) within focus group discussions.

With this approach in mind, the analytical process began with the identification of raw data units (RDUs) from meaningful quotations situated within the text. Predefined constructs from Holland et al. (2010) were used as a deductive guide for categorization (Bradley, 1993). Further guidance was elicited from current knowledge of psychological qualities identified in previous work involving adult athlete populations (e.g., Durand-Bush & Salmela, 2002; Gould et al., 2002; Orlick & Partington, 1988). For example, one coach said players “should be the leading light and people should follow them.” At first glance, this RDU may be coded under leadership in Holland and colleague’s taxonomy. However, further consideration and guidance from Gould et al.’s (2002) finding that being a leader can also reflect broader social skills, the RDU was coded within responsibility for self’s subtheme of role model. RDUs outside of Holland et al.’s taxonomy were inductively analyzed and grouped with RDUs of a similar meaning to form additional themes. This analytical process grouped RDUs with a similar meaning together. Consistent with Sim’s (1998) view that the extent a topic is discussed is influenced by group dynamics rather than reflecting absolute relevance, no minimum number of RDUs were required for a subtheme to be formed.

Following analysis of the data by two independent researchers, RDU groupings were compared and discussed over several consecutive days to reach consensus, assure validity of terms, and minimize researcher bias (Côté et al., 1993). A similar procedure to reach investigator triangulation has been successfully adopted by previous qualitative researchers in sport psychology (e.g., Gould et al., 1992; Scanlan, Stein, & Ravizza, 1989). Further, the resulting data themes were discussed with research associates of the lead investigators who questioned classification, and challenged the analysis to ensure a robust case was made for the interpretation (Krane, Andersen, & Streat, 1997). The use of independent coders and peer review is advocated to enhance credibility and trustworthiness to the qualitative data (Patton, 2002).

## Results

### Holland and Associates' (2010) Participants and Findings

To contextualize the results gleaned from parent, coach, and SAS focus groups, information relating to the youth rugby players and sport development program from Holland and colleague's (2010) study is provided here. Forty-three under-16 district level male rugby players ( $M_{age} = 15.9$  years,  $SD = 0.8$ ) participated in six focus group discussions. Involved at the highest level of rugby for their age group, these players were considered to be at an elite level. All participants were involved in one of two regional programs designed to identify and develop young rugby players run by a UK national sporting body. Specifically, the program's purpose is to develop players with recognized potential to perform to the highest standard. For under-16 players, this standard is regional age-grade squads (i.e., equivalent to state level in the USA), with the view to future representation in national age-grade squads and senior professional and international teams. Although having reached this status, the athletes in question had not previously received any formal psychological skills training.

Following inductive content analysis of the data, 11 psychological quality categories emerged. To remain true to the inductive philosophy, Holland et al. (2010) labeled categories that captured player perspectives, rather than previously defined scientific constructs from the literature. For example, the under-16 rugby players described mental toughness as displaying salient constructs such as confidence and leadership during pressurized or stressful situations (for a summary of all 11 psychological quality meanings see Table 1).

In terms of the current study, firstly we address the perspectives held by participants (parents, coaches, SAS) of the psychological qualities they perceive relevant to elite adolescent rugby players. Second, findings concerning influential others own perceived role in supporting the development of these desired psychological experiences are presented.

### Psychological Qualities

Analysis of focus group transcripts from the current study elicited 330 RDUs which grouped into 11 higher order themes and 30 subthemes. These higher order themes are consistent with those identified by young players in Holland et al. (2010). Although a number of consistencies were found in the current views reported by participants and those previously presented by young rugby players, differences between groups were identified in the subthemes that contribute to each higher order construct (see Table 1 for a summary). Of the 30 subthemes discussed in the current study, 25 were consistent with player perceptions, and five were new themes that emerged from the present data. Only new subthemes are discussed in light of the perceptions communicated by each participant group. For interested readers, please refer to Holland et al. (2010) for a comprehensive discussion of all themes emanating from the views of elite under-16 rugby players.

**Game Sense.** An additional contributing subtheme to the higher-order theme of game sense emerged for the coaches. According to the coaches, players needed to be problem solvers able to adapt and overcome challenges faced in game situations.

**Table 1 The Higher Order Psychological Quality Categories and their Contributing Subthemes Identified by Under-16 District Level Rugby Players and their Influential Others**

Perceptions of under-16 district level rugby players (Holland et al., 2010)		Perceptions of influential others to under-16 district level rugby players				
Higher order themes	Meaning	Subthemes	Emerging Subthemes	Parents	Coaches	SAS
Appropriate attentional focus	Ability to regulate appropriate intensity and direction of attentional focus.	Appropriate attentional focus		L	L	L
Determination	Desire and commitment to performance and development through intense effort.	Desire to improve Work ethic		L	L	L
Game Sense <sup>a</sup>	Awareness to facilitate purposeful and effortful effective game play.	Desire to succeed Decision making Effective game communication		L	L	L
Responsibility for Self <sup>b</sup>	Ability to conduct oneself in a manner appropriate of an elite athlete.	Prepared Respect Sportspersonship Life balance Athlete lifestyle	Problem Solver	L	L	L
		Off-pitch communicator		L	L	L

(continued)

**Table 1 (continued)**

Perceptions of under-16 district level rugby players (Holland et al., 2010)		Perceptions of influential others to under-16 district level rugby players					
Higher order themes	Meaning	Subthemes	Emerging Subthemes	Parents	Coaches	SAS	
Confidence	Belief in ability to achieve, promote, and develop through task engagement.	Confidence to win		L	L		
		No fear of failure		L	L	L	
		Physical confidence		L			
Squad Spirit	Leadership and support fostering team cohesion for performance and well-being.	Confidence to improve			L		
		Self-efficacy			L		
		Leadership		L	L	L	
		Peer support				L	L
		Effective team player		L		L	L
Self Aware Learner	Ability to initiate and engage in activities for positive development.	Social skills				L	
		Take criticism		L			
		Go-Getter		L	L	L	
			Honest self-appraisal	L	L	L	
			Application of information	L	L	L	

Perceptions of under-16 district level rugby players (Holland et al., 2010)		Perceptions of influential others to under-16 district level rugby players				
Higher order themes	Meaning	Subthemes	Emerging Subthemes	Parents	Coaches	SAS
Mental Toughness <sup>e</sup>	Maintenance of optimal mental qualities in face of adversity.	Determination under pressure Appropriate attentional focus under pressure Leadership under pressure		L	L	L
Regulation of performance state	Psychophysiological state to perform optimally.	Optimal performance state	Coping with injury	L		L
Enjoyment	Continued fun and satisfaction from sport participation.	Aggression Enjoyment		L	L	
Adaptability	Ability to positively adapt to new environments and sporting pressures.	Adaptability		L		L

*Note.* For conciseness, subthemes discussed by players in Holland et al. (2010) and by one or more significant other groups are included in Table 1. Additional subthemes only highlighted by players are noted below. In the higher order theme of:

<sup>a</sup> Game sense, *creativity* was also perceived by players as a contributing subtheme.

<sup>b</sup> Responsibility for self, *role models* was also perceived by players as a contributing subtheme.

<sup>c</sup> Mental toughness, game sense under pressure, confidence under pressure, and regulation of performance state under pressure were also perceived by players to be contributing subthemes.

One coach explained the reason for this desired quality in players was, “because ultimately the game is about solving problems.”

**Responsibility for Self.** Under the higher order theme of responsibility for self, off pitch communication emerged as a new subtheme from the data analysis. Parents and SAS highlighted that players need to have the ability to confidently and effectively communicate with peers and support staff off the field of play. According to SAS, for example, “a positive calm communicator...that’s being confident enough to communicate with adults effectively” was considered desirable at the under-16 district level of rugby.

**Self Aware Learner.** For all participant groups, self aware learner was supported by two further subthemes not previously revealed in the data obtained from players. Honest self-appraisal captured players who are able to honestly reflect on their abilities and performances in an objective manner. This self-reflection was identified by coaches to be a positive step in developing a player’s game: “[it] is hard to do sometimes, to admit your fallibilities and. . . admit your mistakes. . .but the ones that can do it are the ones who will learn probably quicker and move on.” Finally, the subtheme of application of information emerged and encompassed players’ ability to quickly take information on board and reproduce it as a physical action. One coach reflected that, “one of the main skills and especially at this level is their ability to soak up information and reproduce what we’re asking them to do practically, you know physically.”

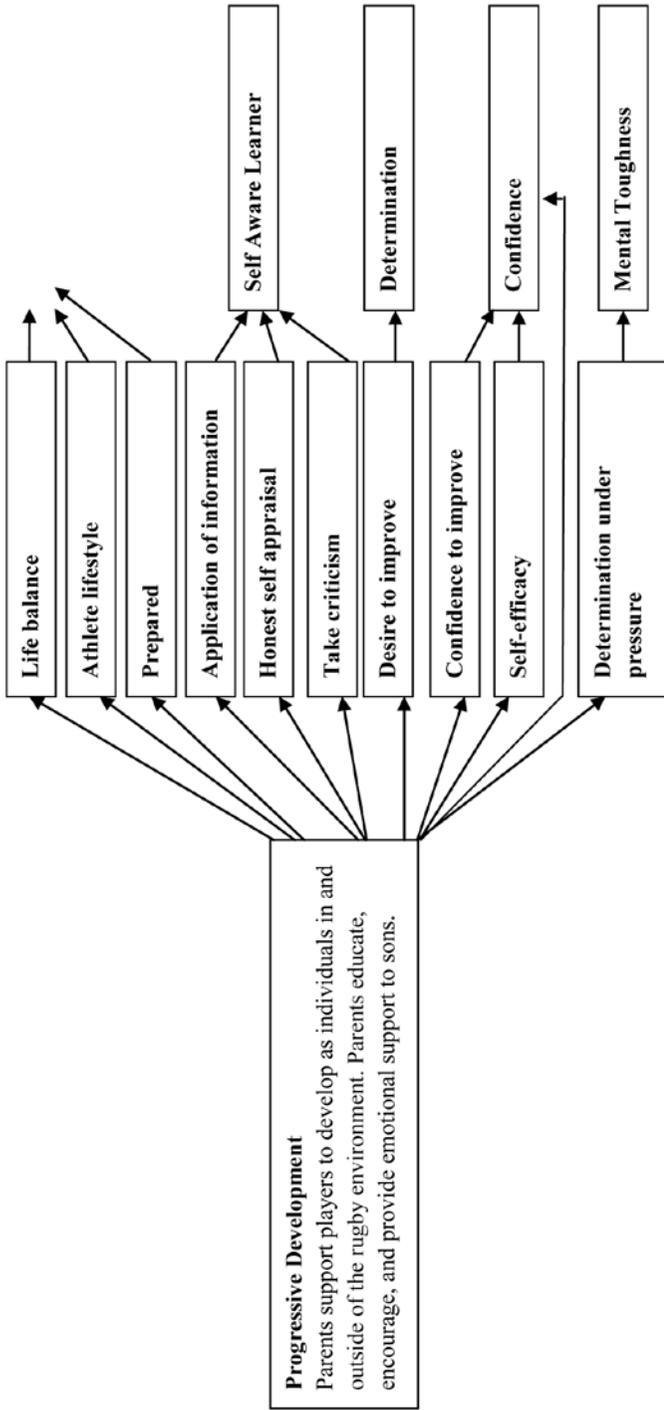
**Mental Toughness.** For the parents of players, a new subtheme located under mental toughness emerged and was labeled coping with injury. Parents viewed players’ ability to deal with the psychological demands of injury as, “a big thing”, and having, “the mental skills to actually deal with it and attitude towards injuries is very important.”

## Roles of Influential Others

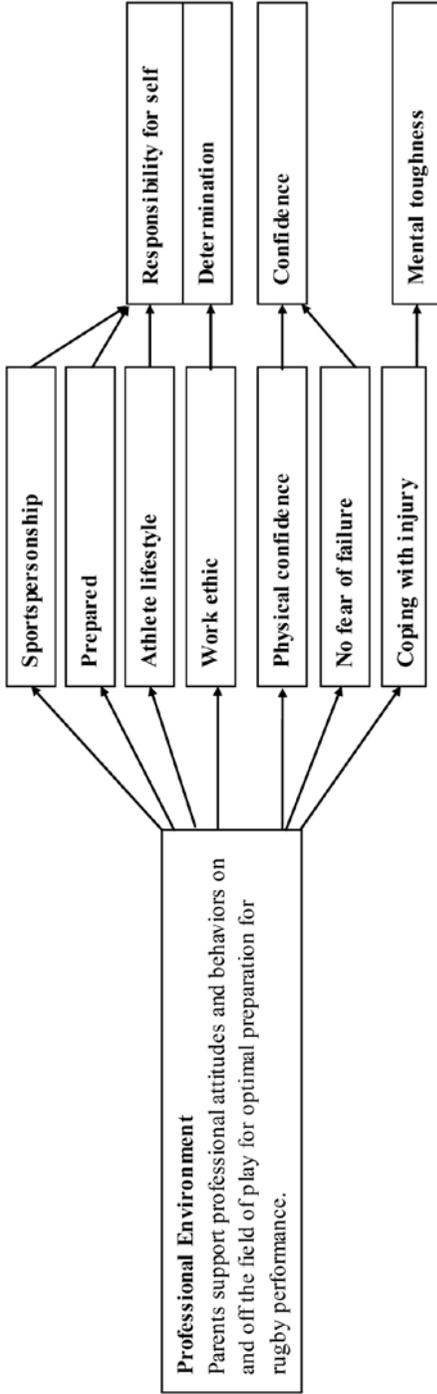
All participant groups recognized a role in supporting the players’ development of desired psychological qualities. These roles were categorized into three higher-order support strategies and environmental dimensions. First, *progressive development* referred to facilitating individual growth as a rugby player as well as an all round person. Specifically, influential others described how they helped athletes manage resources for optimal engagement in achievement activities within and outside rugby. At this specific age, facilitating progressive development involved regulation processes of increasing player awareness, reflection, and personal evaluation as well as challenging athletes in order to make significant gains.

The final two categories were specific to rugby participation. Namely, *professional environments* were created to manage player expectations and encourage disciplined conduct toward rugby participation. Parents, coaches, and SAS all identified a role in, and behaviors toward, facilitating conditions that assist in developing appropriate player attitudes and behaviors for optimal and adaptive rugby participation on and off the field of play (see Figures 1 through 9).

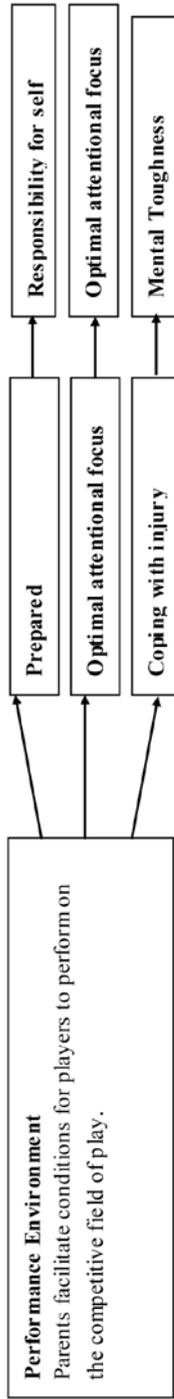
A final category focused on prematch preparation for facilitating players’ competitive performance, and optimizing conditions for players during matches.



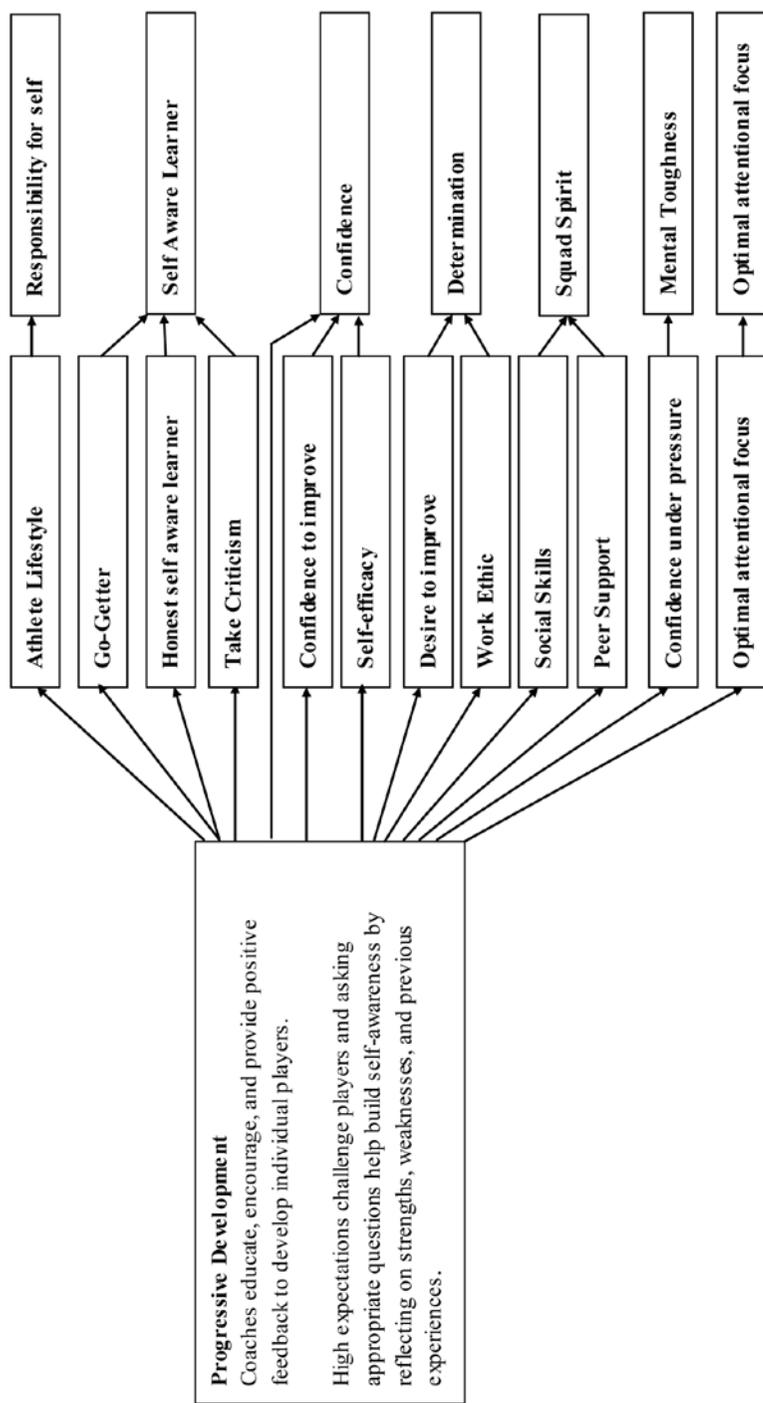
**Figure 1.** Parents' perceived role in supporting players' progressive development.



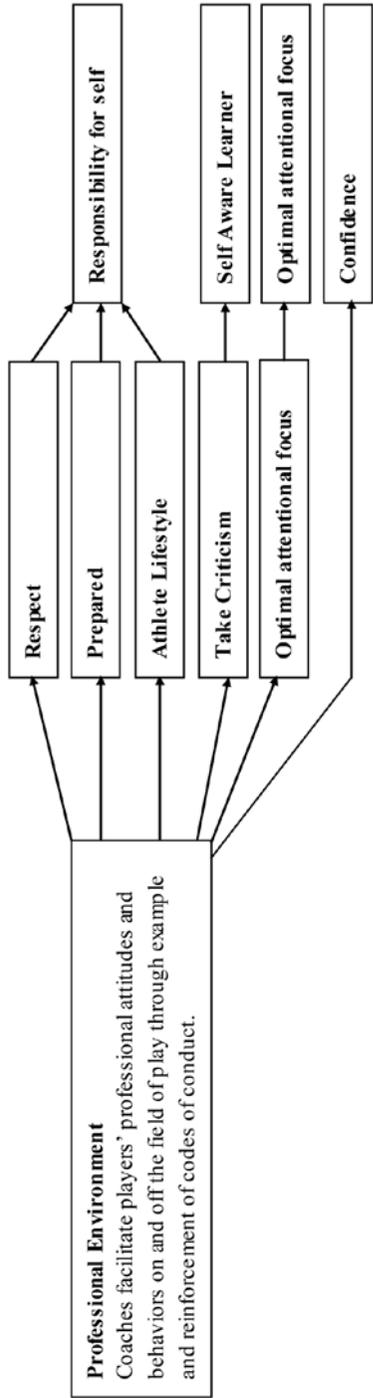
**Figure 2.** Parents' perceived role in creating a professional environment for players.



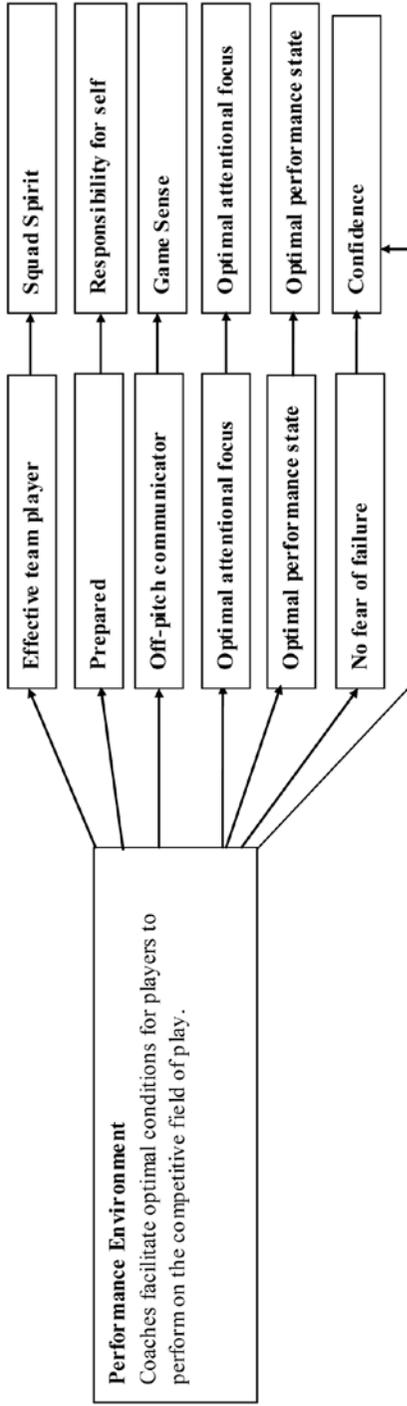
**Figure 3.** Parents' perceived role in creating a performance environment for players.



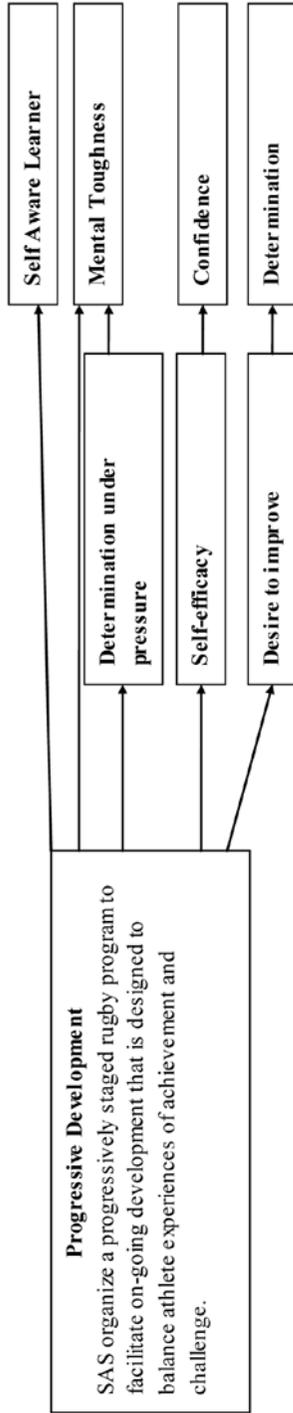
**Figure 4.** Coaches' perceived role in supporting players' progressive development.



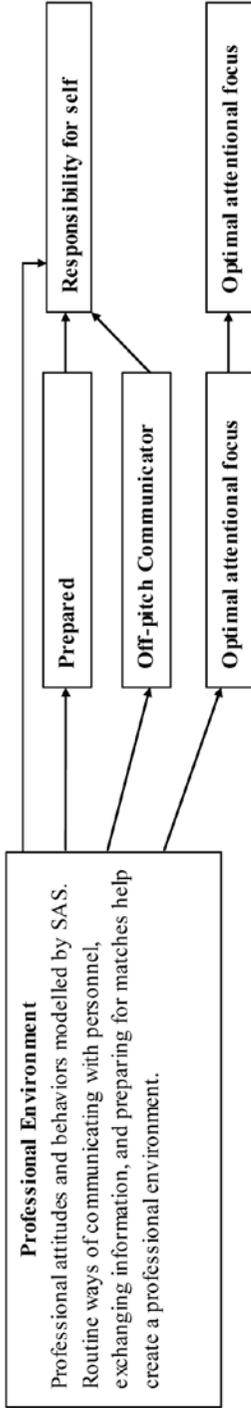
**Figure 5.** Coaches' perceived role in creating a professional environment for players.



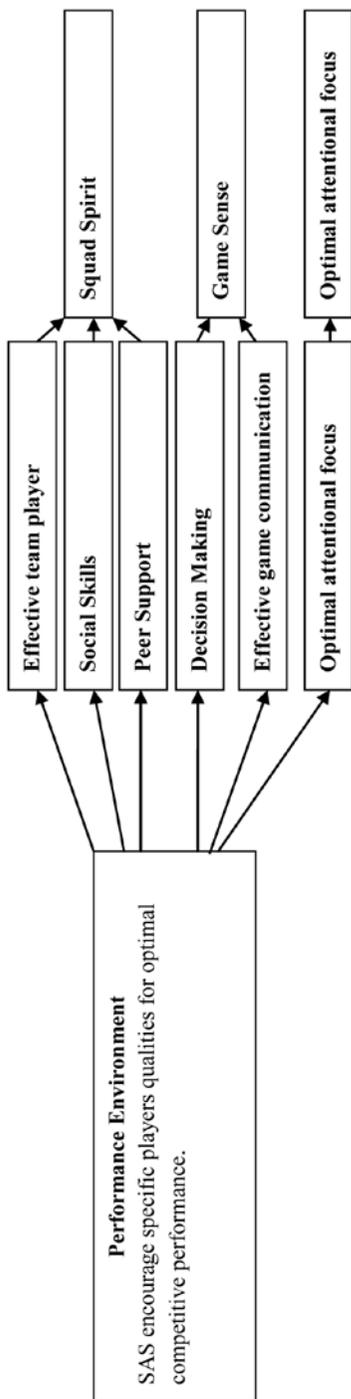
**Figure 6.** Coaches' perceived role in creating a professional environment for players.



**Figure 7.** Sport administration staff (SAS) perceived role in supporting players' progressive development.



**Figure 8.** Sport administration staff (SAS) perceived role in creating a professional environment for players.



**Figure 9.** Sport administration staff (SAS) perceived role in creating a professional environment for players.

All three groups spoke about the importance of creating *performance environments* to facilitate desired psychological qualities pertinent to competitive performance. In particular, coaches and SAS identified strategies to maintain player confidence and attentional focus. The roles and behaviors of each participant group are subsequently discussed in relation to these three higher order themes.

## Parents

**Progressive Development.** Parent discussions focused on supporting the progressive development of their sons in rugby and other areas of life (including academia) to facilitate specific psychological qualities. One father reflected on his own previous rugby experiences with the hope of fostering feelings of confidence and determination in his son. This father explained to his son, “I got to a certain level and you are far better. You can do much better than what I did...and skill levels are a huge part [of that].”

Parents perceived they played a role in helping their sons make sense of their rugby performances. In particular, following a poor performance or a team defeat, parents recognized that players often “stew in...their juices too long at their age. You need to snap them out of it sometimes”. Another parent agreed that young elite rugby players have a tendency to ruminate after a poor performance, but are not always ready to reflect. This parent discussed the importance of timing support, and when their son “doesn’t want to talk about it you have got to let them be and let them stew”. Individuals agreed that “you have got to get your timing right with feedback...I would never wade into my son if he played badly...one comment in the car...it is just dynamite.”

Several strategies were proposed by parents to help the young players conduct an honest self-appraisal and learn from their mistakes. A father spoke how after a poor performance he would allow players to, “take...20 minutes and think about the negatives of it and once...you get in the shower that is it, over with. You leave it behind and then work from the positives.”

Other parents also spoke about the importance of reflecting on the good and poor points of performance. During this reflective appraisal, parents helped players become self aware learners and develop from mistakes. For example, one parent spoke about how players “should talk over their mistakes. You know, they should...analyze their matches, and say what they are going to learn from it and do differently next time.”

Parents also perceived a role in helping to develop the whole person. Encouraging their sons to have a balanced lifestyle within which rugby forms an important, but not sole, part was expressed by several individuals. For example, one parent said “it’s important to have a balance too so they are not focused only on rugby and they have other interests.” Parents saw the pursuit of multiple activities to be crucial because a rugby career was not a certainty for their sons. Several parents spoke about helping players maintain a sense of perspective in life. One father spoke about “managing their expectations” and another commented how he had said to his son “let’s be honest here, to get through to a professional player in this sport...is limited.’ In the background you have got to have...balance and if they don’t make it, well, not to be too disappointed with it”. Other parents agreed and saw it was their responsibility to “think about their [son’s] future”, and encourage motivation

toward school work. To help maintain a sport-school balance, one parent adopted an authoritative role and revealed that “I sometimes say to my son, ‘you are not playing. You are playing too much. You are tired, you have got your homework to do, off you go’”. A more autonomous approach was adopted by some parents who offered advice and allowed their sons to make their own choices. For example, one parent said “you have got to give them your advice and then whatever the decision they make, give them your full support.”

**Professional Environment.** Parents viewed themselves to have a role in creating a professional environment for their athlete sons where attitudes and behaviors are facilitated and reinforced for optimal rugby engagement on and off the field of play. Support in this area involved educating players on the commitment and work required to be a professional rugby player. This point is illustrated by one parent who was concerned her son was taking creatine supplements. The parent perceived pressure for selection led players to consider taking supplements: “it’s the fear factor isn’t it? If you are not using it the other kid is. You want to stay one step ahead”. Although supplements may have legitimate positive (or negative) performance effects, parents reinforced to their sons that having a dedicated work ethic was necessary to achieve in sport: “it’s about hard work and not something you can just take.”

In helping players to understand no ‘short-cuts’ exist to succeeding as a professional athlete, parents assisted their sons in maintaining a good work ethic. One parent recognized that “boys in particular are quite lazy. They need a kick up the bum”. This motivational role was deemed particularly important when managing injuries, as illustrated by one parent reflecting on his son’s lack of engagement in rehabilitation exercises: “‘This is what you have to do you know.’ He wants to be on msn (Microsoft Network) with his mates... ‘Well...do you want to get back or do you not want to get back?’”

In the parents’ view, part of developing a professional environment involved helping players live a lifestyle beneficial to rugby development. The night before competitions, one parent described how her role involved, “getting them to bed early and making sure they are not out too late”. Furthermore, parents encouraged players to have breakfast before a game, as well as providing clean kit and transport to support their rugby participation. However, parents felt they would be more effective in facilitating appropriate behaviors for rugby if supported by coaches and SAS. One parent spoke about seeking “back up as parents to...instruct [players] ‘go to your bed at ten o’clock at night...before you play, have something in your stomach...because the [national governing body] think it is a good idea.’”

**Performance Environment.** Parents spent the least amount of time discussing strategies to support players’ psychological qualities desirable for competitive rugby performance. Indeed, parents recognized maintaining an inconspicuous role at matches and participants noted that “parents shouting off the touchline” was considered distracting for players.

## Coaches

**Progressive Development.** Coaches discussed ways of facilitating desired psychological qualities in conjunction with coaching physical, technical, and

tactical skills. Coaches viewed training sessions as an opportunity to facilitate player awareness and appraisal of performance. To accomplish honest self-appraisals in players, one coach described using a self-rating system: “just mark it out of ten... ‘what’s your impression...out of ten for that last bit?’ Get the [player’s] mark. If it is low we’ll wonder why”. Coaches also encouraged players whose confidence had dropped following a mistake by helping players focus on how to improve. As one coach described, “you can see them start to...beat themselves up...so rather than do that and get negative thoughts it’s more a case of encouragement”. To further guard against mistake rumination, coaches carefully constructed questions to help players understand why an error had occurred and consider ways to improve, as illustrated by one coach saying:

So you pull up that player. ‘what about that could you have done better, because you dropped that ball?’

‘Well, I had my hands too far apart.’

...that’s it, ‘get back to it!’ So you ask them what they think they could’ve done better...get the feedback that way and then...hopefully build their confidence rather than slating them.

Coaches agreed that some players found honest self-appraisal a challenge, and noted “[it] is hard to do sometimes, to admit your fallibilities and...your mistakes... for boys that age”. For these players, video was used to aid player awareness and their ability to self-appraise. For example, a coach described when “you sit down with boys and get them to watch a video...they see something different”. Furthermore, the use of reflective questions in conjunction with video was considered effective by another coach, “you... give them their own game, and say ‘what are you doing?’ ... ‘what are you thinking at this point?’”. Although a general consensus was communicated between coaches in support of video, one coach commented on its insufficiency as a strategy for developing player awareness. Reflecting on a particular player this coach noted, “he had a completely different take on what had happened...just couldn’t take the information in. It was like a defence mechanism, he just shut down.”

When developing young rugby players, coaches perceived they had a role in maintaining athlete confidence through encouragement and praise. However, coaches also challenged players to continuously improve, by saying “you’re here because you’re good enough...just make sure you’re showing it”. Similarly, coaches spoke about setting standards for players and “coaching them to reach those standards”. Other coaches considered constructive criticism helpful to foster player motivation and commented “they don’t ever get [criticized]...maybe [it’s] what they need to take them to the next level, and kind a go ‘look you need to be better than this.’” However, coaches also pointed to a balance between criticism and encouragement that facilitated determination while protecting levels of player confidence.

When working with elite adolescent rugby players, coaches acknowledged they are not “the be-all and end-all” in developing individuals, and viewed a role in helping players to help each other as well as themselves. Several coaches encouraged peer support between squad players, with one coach sharing an experience when “I asked [the players]: ‘how many coaches do we have in the session here?’

First answer: ‘four?’...and then some people thought: ‘oh hang on a minute. All of us!’ And that’s the answer”. Further, coaches encouraged players to praise each other to build confidence in the squad, as one coach describes “guys need to be able to give each other praise because if...your teammate tells you ‘fantastic pass!’ your shoulders go up and the guys have a little more confidence and that bonding comes a little bit closer.”

To help players take overall responsibility for their own rugby development, coaches saw themselves as signposts. One coach recognized that “we can only give them that little bit, the taster”. Another participant agreed that “a part of how we help them achieve...is to point them in the right direction...It’s not us giving them everything. They have to go and do it for themselves.”

**Professional Environment.** Coaches talked about developing an environment that demands professional conduct in players’ attitudes and behaviors toward rugby. Several strategies adopted by coaches in facilitating athlete responsibility were discussed. One coach gave players a choice in how to conduct themselves, and said “You just talk types of players, there are the honest ones and there’s the rest...what do you want to be?...what we are trying to expose here [is] the type of person that we want in front of us”. Similarly, coaches set high expectations and standards of behavior from players, as one coach noted that “[we] try to replicate what might occur in the international arena.” Placing players within the professional environment was thought to “build [player] confidence in a way that’s emulating the superstars.” In line with these high expectations at training and competition, coaches expected players to conduct themselves in a professional manner away from the training ground. One coach spoke about players “set[ting]...a target of saying ‘I am not going out with my friends tonight’ and...‘I’m going to go to the gym, I’m going to go for a swim, I am going to sit and look at some rugby.’”

Similarly, coaches perceived a need to continuously educate players on the nature of professional conduct. When individuals failed to behave in a manner consistent with the professional standards set out by staff, coaches would say “we’re not interested in that here” or “that is not the way you should be conducting yourself.” During these discussions, some coaches wondered whether there should be negative consequences as a result of player misdemeanors. One coach emphasized that players “need to know what the good thing to do is,” but expressed a reluctance to discipline athletes as he said “the last thing I want to be doing is humiliating people”. Another coach concurred by commenting, “I totally disagree in terms of being humiliating, we are being teachers.”

**Performance Environment.** For competitive performance, coaches discussed multiple roles in managing desired psychological qualities in players. During prematch preparation, coaches helped facilitate an optimal performance state, as described by one participant “we had a team meeting with a couple of sheets of [paper] and...got them to write down...key words...and those went up in the changing room before the game.” Further, coaches recognized a need for individual players to prepare for matches in different ways. For example, one coach spoke about a specific player “if you...made a point of spending time...with him before the game he would rip things apart. But [as] soon as he felt that he wasn’t getting that reassurance...you never got anything from him”. Similarly, other coaches recognized that “some guys want to be plugged into their I-pod just in their own

world” whereas other players “need a cuddle...there’s only one or two who...do need to be smashing bags.” To further understand players’ preferences for optimal game preparation, another coach asked players, “This is the way we’re planning on preparing for a game guys. Is there anything in here that you don’t like? That you would like changed?”

Coaches also discussed creating a performance environment to instill confidence in players. Members of the coaching team suggested that “what you don’t want is guys going out there scared to let themselves down, or make a mistake”. To remind players of the standard of rugby they are playing, coaches provided players with rugby kit that replicated the senior strip. Coaches hoped wearing the jersey would foster confidence and “pride in themselves, and...in what they’re doing... who they’re playing for.”

Increasing the familiarity of the environment was seen as a further way to help confidence by minimizing uncertainty, but this strategy also was perceived to function as a cue for appropriate attentional focus. Coaches talked of how they, “make the surroundings familiar...with repetitiveness” as well as, “making things routine so [the players] know what is coming.” Some coaches adopted key phrases such as “right boys, boots on switch on,” however it was acknowledged that these cues were only effective to players who listened.

## Sport Administration Staff

**Progressive Development.** The sport administration staff (SAS) viewed selection and participation in under-16 district level rugby to be the first step of a progressive rugby development process through representative age-grades and onto professional rugby. Gradually staging the demands of the program was a deliberate strategy to help players develop specific psychological qualities. An SAS member talked about the incremental nature of the program as a “stage development...and certain things happen in certain areas”. For example, the program allowed players to experience success early on to build confidence, as illustrated by one SAS who commented, “we want to have some success developing these skills so they do have confidence in the process.”

Continuing to build players’ confidence was deemed crucial, and SAS reminded players of their abilities by telling them “what you have done so far is good enough to get you here”. However, SAS also perceived the under-16 program should challenge players. One SAS participant noted “a gradual increase in pressure” and another explained how players “build [a] capacity to cope with different things...a lot of people think that when they get in these programs they should be treated specially... but it’s the opposite, you need to be able to do that and this now.” To help players cope with these increasing demands of rugby, SAS reported educating athletes by “explaining the stresses they will be under...and...what they can expect in terms of the way they will feel.” However, one SAS member noted their level of support was “bar-room philosophy chat” and indicated a desire for scientific grounding when helping players cope with stressors.

To facilitate progressive development, SAS helped players become aware of their own strengths and weakness, and take a greater degree of ownership over their rugby development. One SAS member commented that “a lot of people think... we download all this information to these people. You come to 15 years old and

they have quite a bit of experience...and we just try to...develop that a bit further". Another SAS suggested that "these kids...will not be used to being asked questions and asked on their opinion", therefore SAS encouraged questioning players to increase awareness and reflection on previous experiences.

**Professional Environment.** The SAS perceived a role in developing a professional environment for the players to operate within. The function of the environment was to facilitate desirable psychological qualities in players, as one SAS said "we treat these kids like professional rugby players because we want them to become professional rugby players...we want them to display rugby player attributes." A key professional player attribute was taking responsibility for the self that was purposely modeled by SAS staff through established procedures. SAS gave an example of this process by saying, "we are very precise on how we communicate...I send a letter to you, you send a letter back...If I phone you, you phone back. So we start with getting that protocol if you like, or that structure or routine."

Established routines within the environment are modeled by SAS who repeatedly engage in specific behaviors. SAS reported these behaviors to progress down through the levels to coaches and then to players. As one SAS indicated, "coaches pick on it as well...they pick up on that there are certain ways to do things". Similarly, players learn what is expected of them in terms of behaviors, as one SAS explained "what we don't want is these boys coming to a program or an event or training session and asking 'what is happening?'...before they come they should know, what they are wearing, what is expected."

In general, the development of player routines were supported by SAS to facilitate off-pitch communication and optimal preparation for training and matches. However, the SAS also recognized a drawback to familiarizing player expectations through repetitive processes. Specifically, they proposed that players embedded within the environment are less able to cope when inconsistencies occur away from these established processes. For example, a SAS member suggested these players are "used to being spoken to in a certain way, treated in a certain way, the sessions structured in a certain way, and...if there is anything out of sync, anything throws them."

Finally, SAS perceived the development of behavioral expectations within the professional environment as a way of facilitating optimal attentional focus in players. The SAS reflected on an example when music was used to gain player attention for squad meetings: "with the music they know at every point in time when the switch is down and when the switch is back on...they have got to understand that when there is work time and when there is not." This use of auditory cues was perceived to be particularly useful during squad trips to help players effectively manage their time and attentional focus in squad meetings as well as know when to relax and disconnect.

**Performance Environment.** Finally, SAS discussed roles in encouraging specific player psychological qualities by developing an appropriate performance environment. SAS perceived a key role in providing support to players adversely affected by coach decisions within the performance environment. When a team is announced for a match, for example, SAS are able to help nonselected players clarify their role within the squad. One SAS reflects on a specific situation to describe an example:

[A player's] not started, he's on the bench...I'm watching him and he starts no' participating [in] the warm-up, no' talking to anyone, no' communicating, and...goes away to the toilet in tears. Right, so I'm behind him... 'you have a really important role to play here, support the team.'

SAS perceived additional means to foster squad spirit within the performance environment. For example, one SAS made a point of developing the social skills of quieter players by giving them words to shout that indicate a specific play during a match. SAS describe "we would identify [a player] who doesn't talk very much but when he did everyone shut up, he's the main man in that group."

SAS also viewed themselves to manage the performance environment to allow players to maintain an optimal attentional focus during competitive matches. SAS perceived coaches and parents shouting from the sidelines to be a distracter, and reflective of behaviors which hinder players in making their own decisions relating to game play. SAS reported observing players who "get a penalty kick will look for [whether] they should kick or not...they are looking for someone else and the mums and dads are shouting at them and some of the coaches...as well". To manage these distracting behaviors and maintain desired psychological qualities, SAS commented how they "try and discourage that kind of behavior."

## Discussion

Recent research has examined the psychological qualities relevant to young developing rugby players (Holland et al., 2010). However, the nature and development of these mental characteristics depend on young athletes' social support network made up of diverse groups of influential others and the environments in which they create and operate within (Baker et al., 2003). The present research extended previous work done by Holland and colleagues (2010) with young rugby players by exploring parent, coach, and sport administration staff (SAS) perceptions concerning psychological qualities pertinent during Côté's (1999) specializing years of talent development. This study also examined the roles these influential individuals adopt to support the development of these desired outcomes.

The psychological qualities identified by participants in the current study are in line with the player perceptions identified by Holland et al. (2010). All 11 higher order themes initially discussed by under-16 district level rugby players were also considered by the current study's participants. Consistencies between players and influential others' perceptions with respect to desirable psychological qualities are encouraging. Previous research suggests athletes and coaches who are "on the same page" have a mutual understanding of the former's needs and facilitate working toward common goals (Butler et al., 1993). Furthermore, parents who are aware of their child's psychological needs as a performer should be more able to communicate in a way that maintains a positive social environment (Lauer et al., 2010b).

Developmental psychologists, such as Bronfenbrenner (1977), suggest that it is the interactional social environments constructed between players and significant others that most informs player development. The present study focused on the specific contexts of family and team microsystems within which the young athletes are embedded, and explored the role parents and coaches adopt for facilitating desired psychological qualities in players. Specifically, parents and coaches described

supporting the progressive development of individuals in their rugby involvement and other areas of life. Further, the parents and coaches who participated in the current study discussed direct interactions with players that reinforced development of professional and performance environments. Examples provided by influential others encouraged specific beliefs, feelings, and behaviors in players that reflected the desired psychological qualities previously identified.

Propositions underpinning Bronfenbrenner's (1999) ecological systems theory help explain idiosyncrasies in significant others' interactions with athletes. Specifically, Bronfenbrenner (2005) stipulates that the form, power, content, and direction of proximal processes, or interactions, "vary systematically as a joint function of the characteristics of the developing person and the environment" (p. 178). Consistent with this theoretical assumption, parents suggested their exchanges with athletes were influenced by characteristics of individual players, and adopted different approaches when reflecting on poor performances. For example, some parents favored helping players to cease ruminating thoughts whereas others considered it best to allow players a contemplative period before offering empathy, encouragement, and advice. These postperformance reflections, perceived as important by some of the parents, were reinforced by the targeted coaches. That is, the coaches indicated that they aimed to help players conduct honest self-appraisals of performance. Previous studies emphasize a similar role for coaches in encouraging adolescent athlete self-referencing to help develop technical skills (Strachan et al., 2009). The present finding extends the function of appropriately supported self-referent reflections to protect and foster desired psychological qualities of confidence and determination.

An interesting finding was the views emphasized by parents, rather than coaches and SAS, that athletes should maintain a balanced lifestyle, and pursue multiple activities in addition to rugby. Although this finding may appear surprising for athletes in the specializing years, a time characterized by a commitment to only one or two sports and reduction in extracurricular activities, it is however consistent with previous investigations highlighting athletes' tendency to maintain a number of activities during this developmental stage (Soberlack & Côté, 2003). Maintaining a balanced lifestyle and having the ability to manage several commitments continues to be an important factor in later stages of development when athletes are competing at an international level (Durand-Bush & Salmela, 2002).

When supporting the individual needs of players, parents did not report any potential negative impacts of their behaviors toward their sons. This finding is contrary to previous research exploring the nature of parent involvement (e.g., Holt et al., 2008, 2009; Lauer et al., 2010a, 2010b). One explanation for this inconsistency could be that the current study only focused on the perspective of the individual providing, rather than receiving, the support. Further, parents may not perceive adopting an authoritarian role as potentially harmful to players, but a necessary stance to ensure athletes are appropriately prepared for competitive situations. Interestingly, coaches discussed the need for negative consequences when players step outside established boundaries of behavior and conduct, however were uncertain of how to implement such behaviors in the most adaptive manner. In summary, because previous research has highlighted that harmful exchanges between parents and athletes are more likely to occur during the specializing years, a comparative investigation involving players, parents, and coaches would shed further light on

whether what athletes perceive as harmful, is perceived by significant others to be debilitating or functional.

In the more distal exosystem, SAS highlighted the under-16 rugby program was designed specifically to gradually challenge players and foster development of certain psychological qualities. This finding is consonant with ecological systems theory that proposes for development to occur, interactions must become progressively more complex over time. Other athlete development models such as the Canadian long-term athlete development program ([www.ltad.ca](http://www.ltad.ca)) also reflect this approach. Present findings thus highlight the need to include these more distal influences when considering athlete development (Holt et al., 2008).

Bronfenbrenner (2005) also states that proximal processes need to occur on a regular basis for positive developmental gains to be made. Such repetitive processes were suggested by SAS who gave examples relating to their role in repetitive modeling of desired behaviors and routines. In essence, they felt it was important for SAS to set standards of professional conduct to facilitate a professional environment for the young developing players and their coaches. The SAS observed the maintenance of routine procedures to transfer down system to coaches and finally to players.

In developing an optimal performance environment, SAS discouraged parent-athlete interactions during competition. Although a specific behavioral policy was not in place, parents also perceived an inconspicuous pitch-side role was desirable when their sons competed. Present findings reveal that parents and SAS are cognizant of the potentially harmful impact pitch-side behavior can have on athletes in the performance environment. Specifically, SAS indicate that such behaviors can hinder appropriate attentional focus and discourage independent decision making by players within a game.

## Limitations, Strengths, and Implications

A methodological strength of the study was the multiple focus groups conducted for parents and coach participant groups. In adhering to recommendations for creating homogenous groups however, SAS were grouped together in a single discussion. The findings gleaned from only one SAS session are likely to be confounded by group dynamics present in that particular set of participants (Knodel, 1993). Furthermore, only two individuals met the criteria established for SAS and formed a much smaller group than the groups involved in coach and parent discussions (Kruger & Casey, 2000). Variability in focus group size could have impacted the nature of the data collected. Stewart, Shamdasani, and Rook (2007) warn that fewer than eight participants can lead to a narrow discussion biased toward the views of a few individuals. Given the pyramid structure of sport programs though, those wishing to examine top-down processes from exosystems will typically be faced with a shortage of representative participants as was the case in the current study. However, only having two participants gave SAS more opportunity to discuss psychological qualities in greater depth compared with what was the case in the parent and coach discussion groups. Following previous recommendations for considering multiple levels of human ecology that include more distal, yet influential, personnel and processes (e.g., Holt et al., 2008), further work is encouraged with SAS from other sport development programs.

Finally, it should be noted that a comprehensive examination of all influential personnel within family and team microsystems was not possible in the present work. Future research informed by ecological systems theory for athlete development should consider influence of athletes' team mates. Current findings suggest that athletes from the developmental squads can impact each other in both negative and positive ways. Athletes can play a role in fueling a fear of failure through competition for selection, but can also promote confidence through praise and encouragement of other squad players. These team dynamics relating to desirable psychological qualities were perceived to be operating by parents and warrant further investigation in regard to the views of the athletes themselves.

In light of these limitations, applied implications of the current findings are offered using ecological systems theory as a guide. For applied consultants beginning work with youth athletes in their specializing years, a comprehensive needs analysis should be conducted that examines the multiple developmental influences highlighted by the present investigation. Indeed, a consultant's role may involve optimizing proximal processes between athletes and influential others to successfully promote progressive development, and create effective professional and performance environments.

Within sport development programs, independent sport psychology consultants are well placed to act as a facilitator across different athlete micro and exosystems. For adaptive proximal processes to occur on a regular basis, consistent athlete support needs to be evident across different contexts over time. For example, parents presently expressed a desire for national guidelines or closer communications with coaches and SAS to be more informed when offering advice to their sons. From an ecological systems perspective, such connections between different contexts are known as mesosystems. Previous sport studies have highlighted relationships between mesosystems (Holt et al., 2008), however research in this area remains scant. This promising avenue relevant to applied consultancy requires further attention.

## References

- Abbott, A., & Collins, D. (2004). Eliminating the dichotomy between theory and practice in talent identification and development: considering the role of psychology. *Journal of Sports Sciences*, 22, 395–408.
- Baker, J., Horton, S., Robertson-Wilson, J., & Wall, M. (2003). Nurturing sport expertise: Factors influencing the development of elite athlete. *The Journal of Sports Medicine*, 2, 1–9.
- Beckett, M., Da Vanzo, J., Sastry, N., Panis, C., & Peterson, C. (2001). The quality of retrospective data: An examination of long-term recall in a developing country. *The Journal of Human Resources*, 36, 593–625.
- Bloom, B.S. (1985). *Developing talent in young people*. New York, NY: Ballantine Books.
- Bradley, J. (1993). Methodological issues and practices in qualitative research. *The Library Quarterly*, 63, 431–449.
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *The American Psychologist*, XXX, 513–531.
- Bronfenbrenner, U. (1999). Environments in developmental perspective: Theoretical and operational models. In S.L. Friedman & T.D. Wachs (Eds.), *Measuring environment across the life span: Emerging methods and concepts* (pp. 3–28). Washington, DC: American Psychological Association.

- Bronfenbrenner, U. (2005). *Making human beings human: Bioecological perspectives on human development*. London, UK: Sage.
- Bronfenbrenner, U., & Morris, P.A. (1998). The ecology of developmental processes. In R. M. Lerner (Ed.), *Handbook of child psychology: Vol. 1: Theoretical models of human development* (pp. 993-1028). New York, NY: Wiley.
- Butler, R.J., & Hardy, L. (1992). The Performance Profile: Theory and Application. *The Sport Psychologist*, 6, 253-264.
- Butler, R.J., Smith, M., & Irwin, I. (1993). The performance profile in practice. *Journal of Applied Sport Psychology*, 5, 48-63.
- Conroy, D.E., & Coatsworth, J.D. (2007). Coaching behaviors associated with changes in fear of failure: Changes in self-talk and need satisfaction as potential mechanisms. *Journal of Personality*, 75, 383-419.
- Côté, J. (1999). The influence of the family in the development of talent in sport. *The Sport Psychologist*, 13, 395-417.
- Côté, J., Salmela, J.H., Baria, A., & Russell, S.J. (1993). Organizing and interpreting unstructured qualitative data. *The Sport Psychologist*, 7, 127-137.
- Duda, J.L., & Balaguer, I. (2007). Coach-created motivational climate. In S. Jowett & D. Lavallee (Eds.), *Social psychology in sport* (pp. 117-130). Champaign, IL: Human Kinetics.
- Durand-Bush, N., & Salmela, J.H. (2002). The development and maintenance of expert athletic performance: Perceptions of world and Olympic champions. *Journal of Applied Sport Psychology*, 14, 154-171.
- Fraser-Thomas, J.L., Côté, J., & Deakin, J. (2005). Youth sport programs: an avenue to foster positive youth development. *Physical Therapy in Sport*, 10, 19-40.
- Gould, D., Dieffenbach, K., & Moffett, A. (2002). Psychological characteristics and their development in Olympic champions. *Journal of Applied Sport Psychology*, 14, 172-204.
- Gould, D., Eklund, R.C., & Jackson, S.A. (1992). 1988 U.S. Olympic wrestling excellence: I. Mental preparation, precompetitive cognition, and affect. *The Sport Psychologist*, 6, 358-382.
- Gould, D., Guinan, D., Greenleaf, C., Medbery, R., & Peterson, K. (1999). Factors affecting Olympic performance: Perceptions of athletes and coaches from more and less successful teams. *The Sport Psychologist*, 13, 371-394.
- Grove, J.R., & Hanrahan, S.J. (1988). Perceptions of mental training needs by elite field hockey players and their coaches. *The Sport Psychologist*, 2, 222-230.
- Holland, M.J.G., Woodcock, C., Cumming, J., & Duda, J.L. (2010). Important mental qualities and employed mental techniques: The perspective of young elite team sport athletes. *Journal of Clinical Sports Psychology*, 4, 19-38.
- Holt, N.L., & Dunn, J.G.H. (2004). Toward a grounded theory of the psychosocial competencies and environmental conditions associated with soccer success. *Journal of Applied Sport Psychology*, 16, 199-219.
- Holt, N.L., Tamminen, K.A., Black, D.E., Mandigo, J.L., & Fox, K.R. (2009). Youth sport parenting styles and practices. *Journal of Sport & Exercise Psychology*, 31, 37-59.
- Holt, N.L., Tamminen, K.A., Black, D.E., Sehn, Z.L., & Wall, M.P. (2008). Parental involvement in competitive youth sport settings. *Psychology of Sport and Exercise*, 9, 663-685.
- Jones, G., Hanton, S., & Connaughton, D. (2002). What is this think called mental toughness? An investigation of elite sport performers. *Journal of Applied Sport Psychology*, 14, 205-218.
- Kitzinger, J. (1994). The methodology of focus groups: the importance of interaction between research participants. *Sociology of Health & Illness*, 16, 103-121.
- Knodel, J. (1993). The design and analysis of focus group studies: a practical approach. In D.L. Morgan (Ed.), *Successful focus groups: Advancing the state of the art* (pp. 35-50). Thousand Oaks, CA: Sage.

- Krane, V., Andersen, M.B., & Strean, W.B. (1997). Issues of qualitative research methods and presentation. *Journal of Sport & Exercise Psychology, 19*, 213–218.
- Krueger, R.A., & Casey, M.A. (2000). *Focus groups: A practical guide for applied research* (3rd ed.). London, UK: Sage.
- Lauer, L., Gould, D., Roman, N., & Pierce, M. (2010a). How parents influence junior tennis players' development: Qualitative narratives. *Journal of Clinical Sports Psychology, 4*, 69–92.
- Lauer, L., Gould, D., Roman, N., & Pierce, M. (2010b). Parental behaviors that affect junior tennis player development. *Psychology of Sport and Exercise, 11*, 487–496.
- Leslie-Toogood, A., & Martin, G.L. (2003). Do coaches know the mental skills of their athletes? Assessment from volleyball and track. *Journal of Sport Behavior, 26*, 56–68.
- Litoselliti, L. (2003). *Using focus groups in research*. London, UK: Continuum.
- Orlick, T., & Partington, J. (1988). Mental links to excellence. *The Sport Psychologist, 2*, 105–130.
- Patton, M.Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). London, UK: Sage.
- Scanlan, T.K., Stein, G.L., & Ravizza, K. (1989). An in-depth study of former elite figure skaters: II. Sources of enjoyment. *Journal of Sport & Exercise Psychology, 11*, 65–83.
- Schacter, D.L. (1999). The seven sins of memory: Insights from psychology and cognitive neuroscience. *The American Psychologist, 54*, 182–203.
- Schwab, K.A., Wells, M.S., & Arthur-Banning, S. (2010). Experiences in youth sports: A comparison between players' and parents' perspectives. *Journal of Sport Administration & Supervision, 2*, 41–51.
- Sim, J. (1998). Collecting and analysing qualitative data: issues raised by the focus group. *Journal of Advanced Nursing, 28*, 345–352.
- Soberlak, P., & Côté, J. (2003). The developmental activities of elite ice hockey players. *Journal of Applied Sport Psychology, 15*, 41–49.
- Stewart, D.W., Shamdasani, P.N., & Rook, D.W. (2007). *Focus groups: Theory and practice* (2nd ed.). London, UK: Sage.
- Strachan, L., Côté, J., & Deakin, J. (2009). “Specializers” versus “Samplers” in youth sport: Comparing experiences and outcomes. *The Sport Psychologist, 23*, 77–92.
- Vargas-Tonsing, T.M., Myers, N.D., & Feltz, D.L. (2004). Coaches' and athletes' perceptions of efficacy-enhancing techniques. *The Sport Psychologist, 18*, 397–414.
- Vealey, R.S. (1988). Future directions in psychological skills training. *The Sport Psychologist, 2*, 318–336.