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Toward a Grounded Theory of the Psychosocial Competencies and Environmental Conditions Associated with Soccer Success

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The purposes of this study were to identify and examine psychosocial competencies among elite male adolescent soccer players in order to present a grounded theory of factors associated with soccer success. Participants ($N = 40$) were 20 Canadian international youth soccer players (M age = 16.8 years), 14 English professional youth soccer players (M age = 16.2 years), and 6 English professional coaches. Using grounded theory methodology (Strauss & Corbin, 1998), data analysis followed several coding procedures geared toward theory development. Four major psychosocial competencies that appear to be central to success in elite youth soccer emerged from the data. The competencies were labeled *Discipline* (i.e., conforming dedication to the sport and a willingness to sacrifice), *Commitment* (i.e., strong motives and career planning goals), *Resilience* (i.e., the ability to use coping strategies to overcome obstacles), and *Social Support* (i.e., the ability to use emotional, informational, and tangible support). These results are compared to existing sport talent development research and a grounded theory of the psychosocial competencies and environmental conditions associated with becoming a professional soccer player is presented. Research and practical implications arising from this exploratory theory are discussed.

How do talented children become professional adult athletes? The development of talent among elite musicians, artists, scientists, and athletes has interested researchers for many years and is a classic area of psychology (Bloom, 1985; Ericsson, 1996; Howe, 1999). Recently, a body of talent development research in sport psychology has emerged (e.g., Côté, 1999;

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Durand-Bush & Salmela, 2002; Gould, Dieffenbach, & Moffett, 2002; Vernacchia, McGuire, Reardon, & Templin, 2000). It has been suggested that providing an understanding of the psychology of exceptional abilities may be one of the few areas where sport psychologists can lead the way for the umbrella discipline of general psychology (Gould, 2002).

Howe, Davidson, and Sloboda (1998) provided an explicit definition of talent that includes five properties: (a) talent is at least partly innate; (b) trained people will be able to identify advanced indications of talent; (c) early indications of talent provide a basis for predicting who is likely to excel; (d) only a minority are talented; and (e) talents are relatively domain-specific. As such, 'talent' tends to refer to innate abilities, whereas 'development' reflects how abilities are nurtured and enhanced. There have been debates concerning the relative contributions of innate abilities and practice effects in the development of high achievers (e.g., Ericsson, 1996; Howe et al., 1998; Singer & Janelle, 1999). Given that neither extreme environmental nor extreme genetic approaches may ever be conclusively supported (Csikszentmihalyi, 1998), most modern developmental psychologists hold a position somewhere between the two. The primary question is no longer whether nature or nurture is most important, but rather "what kind of interaction occurs between the two, and how this influences development" (Mönks & Mason, 2000, p. 141). Accordingly, sport psychology researchers have recently called for increased attention to developmental issues regarding achievement in sport (Côté, 1999; Durand-Bush & Salmela, 2001).

There are several consistent findings that can be summarized to represent the talent development literature. For example, research shows that the acquisition of high abilities requires a long and intensive process of encouragement, nurturance, education, and training (Bloom, 1985; Howe, 1999). Ericsson, Krampe and Tesch-Römer (1993) proposed that approximately 10 years of deliberate practice is required to achieve expert performance levels (whereby deliberate practice represents highly structured, goal-oriented activities that are intended to improve performance). There are distinct phases during the maturation of high-achievers, including playful initiation in a domain during childhood, development of increasing investment during adolescence, and perfection of skills as the talented performer becomes an adult (Bloom, 1985; Côté, 1999; Glaser, 1996). Families play an important role in stimulating interest in a domain, providing moral and financial support. However, the influence of the family tends to diminish as the performer matures (Bloom, 1985; Côté, 1999; Csikszentmihalyi, Rathunde, & Whalen, 1993; Glaser, 1996; Howe, 1999; Patrick et al., 1999).

Elite performers do not differ substantially from the general population in terms of 'hardware' such as reaction times, working memory, or general intelligence. However, experts have superior 'software' such as declarative and procedural knowledge, perceptual skills, and pattern recognition abilities which they appear to have learned through extensive engagement in their chosen domain (Abernethy, Burgess-Limerick, & Parks, 1994). Research suggests that successful elite athletes posses a range of psychological characteristics including the ability to cope with anxiety and obstacles, self-confidence, competitiveness, intrinsic motivation, the ability to block out distractions, and the ability to set and achieve goals (Gould et al., 2002; Vernacchia et al., 2000). There is also general agreement that to achieve success individuals require single-mindedness, commitment, determination, and the ability to persevere in the face of difficulties and distractions (Csikszentmihalyi et al., 1993; Ericsson et al., 1993; Howe, 1999; Patrick et al., 1999).

The majority of talent development research in sport psychology has been retrospective and descriptive in nature. That is, high-achieving elite adult athletes have been asked to reflect on their athletic careers (e.g., Durand-Bush & Salmela, 2002; Gould et al., 2002; Vernacchia et al., 2000). Research is also required with talented young athletes in order to understand more about early stages in talent development (Durand-Bush & Salmela, 2001). Furthermore,

if sport psychologists are to lead the way in talent development research, theories concerning the development in talent in sport are required. Beyond Côté's (1999) stage model of the influence of family context on the early career development of athletes, most theories relating to the development of talent were not originally designed to be sensitive to the unique demands of sport (e.g., Ericsson et al., 1993; Howe, 1999). There has also been a substantial amount of qualitative research examining talent development, but theoretical developments from qualitative research have been largely absent, both in the social sciences generally (Morse, 1997), and more specifically in sport psychology. As such, there is scope for the development of sport-specific talent development theory that will add to the extant literature in this area.

Only a minority of adolescents who show early indications of talent respond to the need to increase effort and commitment to develop their talent (Csikszentmihalyi et al., 1993). It is crucial that researchers examine what factors support commitment to talent development among adolescents who have exhibited early signs of promise (Patrick et al., 1999). Research with young athletes is important because it may reveal more information about early stages of talent development than examining the recalled perspectives of athletes who have already reached a mature level of performance (Côté, 1999). Such research is required to determine how factors associated with success can be maximized in the lives of young athletes wishing to develop their talent to its full potential (Durand-Bush & Salmela, 2001). The purposes of the research presented here were to identify and examine psychosocial competencies among elite male adolescent soccer players in order to present a qualitatively-derived grounded theory of factors associated with soccer success.

METHOD

Participants

Sample 1: Canadian Soccer Players

Twenty adolescent Canadian international soccer players (M age = 16.8 years, SD = 1.7 years) were interviewed in the first phase of data collection. All players were members of the Canadian under-17 or under-20 national team squads, 17 players were born in Canada, 2 in Africa, and 1 in Europe. There were 2 defenders, 11 midfield players, 4 strikers, and 3 goalkeepers. Four participants attended university, with the remainder attending high school or taking correspondence courses. Canadian players are participants numbered CP1 to CP20 in the Results section (i.e., Canadian Player 1 = CP1).

Sample 2: English Soccer Players and Coaches

Fourteen English professional youth players (M age = 16.2 years, SD = 0.9 years) and six coaches were interviewed in the second phase of data collection. They were drawn from the youth academies of three Premier League clubs and one large First Division club in England. Of the players, 13 were born in the British Isles (1 in Wales, 2 in Northern Ireland, and 10 in England), and 1 was born in Australia. There were 3 defenders, 4 midfield players, 3 strikers, and 4 goalkeepers. All players attended vocational college as part of their soccer scholarships, and 10 had completed their final examinations at high school (aged 16). English players are numbered EP21–EP34 in the Results section (i.e., English Player 21 = EP21).

All six coaches were full-time professional soccer coaches employed by the English youth academies visited. Coaches ranged in age from 35 years to 64 years old. Four of the coaches were the academy directors (and therefore ultimately responsible for the development of youth players at their respective clubs). All coaches possessed an UEFA (European soccer federation) A-license coaching qualification and had been coaching youth players for at least five years. Two

coaches possessed an education degree (and had been full-time teachers and part-time semi-professional soccer players previously). The remaining four coaches had been professional soccer players in England before turning to youth coaching.

Data Collection

Procedure

Data collection was broken down into three fieldwork trips; the first to an under-19 Canadian national team camp in Toronto, and the second to an under-17 Canadian camp in Montreal. The final fieldwork trip involved a two-week visit to four professional youth academies in England. The first author interviewed all players in private rooms at the respective training complexes.[1]

Interviews

Player interviews ranged in duration from 30 to 90 minutes, with most lasting approximately 45 minutes with Canadian participants and 30 minutes with English players. The first player interview lasted 90 minutes and covered each area in great detail. As data collection and analysis progressed, questions became more focused and interviews were generally shorter. A semi-structured interview guide consisting of five main areas was used. The five main areas were: (a) *Ambitions* (e.g., "What are your ambitions in football? What motivates you to pursue these ambitions"), (b) *Training Environment* (e.g., "Describe your training week. How would you assess the level of challenge you experience?"), (3) *Personal Development* (e.g., "What qualities do you have as a person that have contributed to your development as a player? What are your strengths as a player?"), (4) *Overcoming Obstacles* ("What obstacles have you had to overcome as a player? Who helped you overcome them?"), and (5) *Mental Preparation* (e.g., "What mental qualities are the most important at the professional level? What mental strengths do you possess?").

Interviews with coaches ranged in duration from 45 to 90 minutes. Coaches were asked questions pertaining to four main areas: (a) *Soccer Development System* (e.g., "What is the structure and aim of your youth academy? How do you try to develop players?") (b) *Desired Player Qualities* (e.g., "What are the most important qualities a player needs to make it as a professional? What qualities do your current crop of players possess?"), (c) *Training Environment* (e.g., "How do you prepare players for professional demands? What areas do you work on?"), and (d) *Mental Aspects* (e.g., "What are the mental strengths you are looking for in players? What mental qualities are most important for professional players?"). All interviews were transcribed verbatim by the first author immediately following the fieldwork trips.

Data Analysis

Overview of Data Analysis Procedures

The system of data analysis used in this study was based on Strauss and Corbin's (1998) version of grounded theory, which involves progressive coding techniques that move the analyst from description, through conceptual ordering, to theorizing. Data collection progresses according to principles of theoretical sampling. That is, initial data are analyzed, responses to some questions become saturated, some new questions arise, certain categories require more

[1] Informal interviews with Canadian international and professional coaches, fieldwork observations and documentary analysis were also employed to supplement the interview data presented here. Although these data collection methods provided valuable contextual information and helped with interpretations of meanings, the data are not presented as 'raw data' per se.

saturation, and more data is collected. Because data analysis starts as soon as the first data are collected in grounded theory, Canadian data (i.e., data derived from sample 1) were first subjected to the processes of open and axial coding in order to develop a series of concepts, sub-categories, and main categories. English data were then coded into the existing concepts, sub-categories, and categories that had been created from the Canadian data. As the English data were coded, both data sets became amalgamated and similarities and differences between Canadian and English participants were assessed using the constant comparative method (Glaser & Strauss, 1967). Finally, the entire data set (i.e., both the Canadian and English data together) were subjected to selective coding and the application of analytic tools in order to develop the final theoretical integration. In the following section the analytic techniques that were applied to the data are discussed and described. Although we refer to the steps of open-, axial-, and selective-coding, data analysis in grounded theory is a free-flowing process whereby the analyst uses different coding techniques at different times (Strauss & Corbin, 1998).[2]

Open Coding

Open coding is the analytic process through which concepts are identified and their properties and dimensions discovered (Strauss & Corbin, 1998). During open coding data were broken down, examined, and compared for similarities and differences to develop a number of concepts. For example, raw data extracts relating to 'motives' were identified from the individual transcripts, and then attempts were made to distinguish between different types of motives. As analysis continued, other concepts were identified, and then through constant comparative analysis, placed in the same concept (if they shared common characteristics), or placed into a newly developed concept if characteristics were unique. Those concepts that embraced similar events, actions, and interactions were grouped together under more abstract (i.e., higher level/global) concepts termed categories and subcategories. To assist with the categorizations, each concept, subcategory, and category (once inductively developed from the data collected) was given a descriptive label or essence phrase (Maykut & Morehouse, 1994) that defined its essential characteristics.

Axial Coding

The purpose of axial coding is to reassemble the data that are broken down during open coding (Strauss & Corbin, 1998). Through axial coding, categories and their related subcategories and concepts were refined to form more precise explanations about the psychosocial factors associated with being a successful soccer player. Data were conceptually developed by asking questions related to conditions, actions/interactions, and consequences. The interactions between categories were further explicated through the development of relational statements that linked categories and subcategories with the properties and dimensions of the concepts.

Once axial coding had been completed with the Canadian data set (and a conceptual scheme of concepts, subcategories, and categories created), the English data were introduced into the analysis. It was important that the English data were not 'forced' into the existing conceptual framework, but rather that constant comparison was used to assess the similarities and differences in the data sets to add to the breadth and generalizability of the evolving theory

[2]In order to develop a more complete understanding of the process of grounded theory the first author attended several workshops and conferences pertaining to the methodology. Additionally, one of the key figures in the development of grounded theory, Dr. Juliet Corbin, was a member of the first author's Ph.D. supervisory committee (from which this manuscript is derived). Dr. Corbin worked with the authors to further their understanding of the subtleties of this methodology.

(Strauss & Corbin, 1998). As such, English data that fit with existing concepts were used to add to the depth of those particular concepts. If English data did not fit with existing concepts, a new concept was created. As the English data were coded, in essence the two data sets (i.e., Canadian and English) were 'collapsed' together. For example, there were 16 quotes pertaining to emotional support from parents in the Canadian data set, and 14 similar quotes in the English data set. Both data sets were amalgamated to create one rich and detailed theme (that represented the entire data set).[3]

Selective Coding

Selective coding is used to integrate and refine categories to form a larger theoretical scheme (Strauss & Corbin, 1998). Both data sets were combined and subjected to selective coding in order to produce the final theoretical integration. Theorizing is based on developing explanations between categories and placing findings into an explanatory theoretical framework. Although the first step in integration generally involves the selection of a single central category, in this study four central categories were selected because each appeared to play a critical, interacting, yet unique role in the development of adolescent soccer players. The main categories provided the basis of a theoretical framework, whereas the subcategories and concepts explain what the research is about. Theoretical integration was achieved as findings were compared with previous research and as statements of relationship between categories were developed. All coding was completed by the first author before three experts (the coauthor, another sport psychology expert, and one of the originators of grounded theory methodology) and the member-checkers subjected the categorization processes to further scrutiny. During this extended and rigorous review there were some disagreements about particular categorizations because there appeared to be overlap between categories. Through a process of feedback, discussion, and advocacy, the final conceptual scheme was agreed upon.

Analytic Tools

Inherent within the coding procedures outlined previously are certain techniques that enable the analyst to make theoretical interpretations and form statements of relationship between concepts (Strauss & Corbin, 1998). First, the data were organized into a story line to explain what was apparently going on. Second, diagrams were used throughout the analytic process to visually examine relationships between categories. Third, memos and notes that were recorded after every coding session were intermittently reviewed and compared with the emerging theory. Fourth, the comparative techniques of "flip-flop" and "systematic comparison of two or more phenomena" (Strauss & Corbin, 1998, pp. 94–95) were used to compare professional soccer careers with other professionals (e.g., lawyers). These tools are designed to move the analyst into conceptual, rather than purely descriptive, modes of thinking.

The fifth analytic tool employed to help facilitate the inductive nature of the research enterprise was a delayed literature review. That is, an exhaustive literature review was delayed until the scheme of concepts, subcategories, and categories for both data sets (i.e., Figure 1) had been developed (Strauss & Corbin, 1998). As the extant literature was critically reviewed, the inductively derived findings of the current study were compared to previous research (as reported in the Discussion section). Furthermore, as the process of theory development progressed, the emerging theory was compared with previous talent development

[3]Due to space limitations we have only reported findings that were common to both the English and Canadian samples.

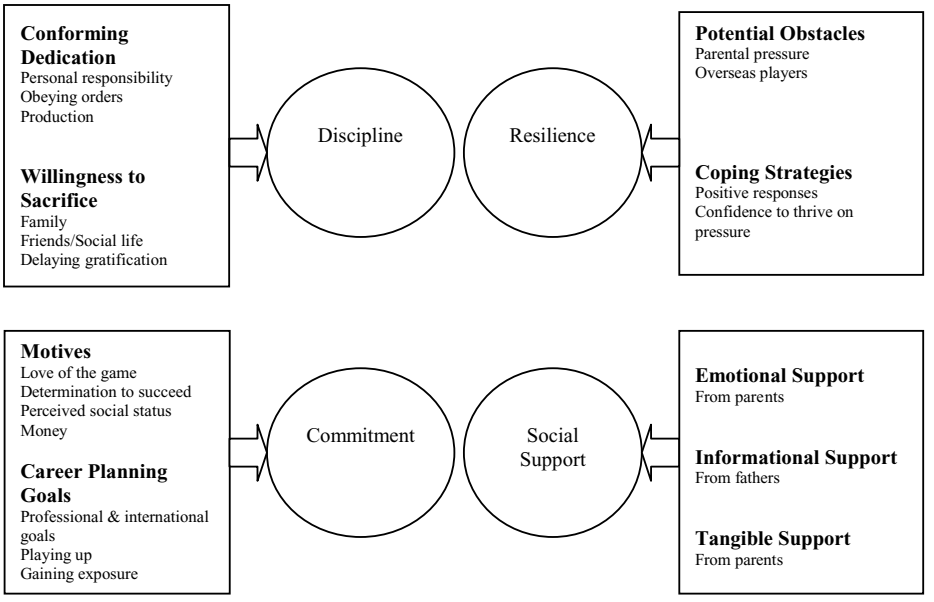

Figure 1. Overview of concepts, sub-categories, and categories pertaining to psychosocial competencies associated with soccer success during adolescence.

research and theory to illuminate plausible connections. Attempts were made to integrate findings with existing theory, and whenever possible, the labels assigned to each category were consistent with terms used in previous psychological research. This practice has been encouraged to avoid terminology confusion in qualitative psychological research (Polkinghorne, 1989).

Member-Checking

Two member-checking techniques were employed to ensure that the results of this study portrayed a recognizable reality for elite soccer players. The first technique reflected a traditional member-checking procedure (Lincoln & Guba, 1985). All original participants from both data sets received a transcribed copy of their interview and initial interpretations. They were then asked to verify the accuracy of the transcript and interpretations, and to confirm that they felt they had been fairly represented. Attempts were also made to re-contact participants by telephone or e-mail at various points throughout the study to seek their views on further emergent researcher interpretations. However, it was difficult to complete a full member-checking process (i.e., gain further reflexive elaboration on the developing conceptual scheme) due to the logistical demands of the study (i.e., time and money) and resultant geographic distance between the participants and researchers. However, two athletes and one coach provided extensive member-checking feedback on emerging interpretations.

Due to the limitations of the traditional member-checking procedure, a second member-checking technique was employed. Six experienced soccer players (M age $= 25.2$ years, $SD = 2.6$ years) who had played professionally in Europe *and* Canada (and were otherwise unconnected with this study) were recruited to provide feedback on the developing grounded

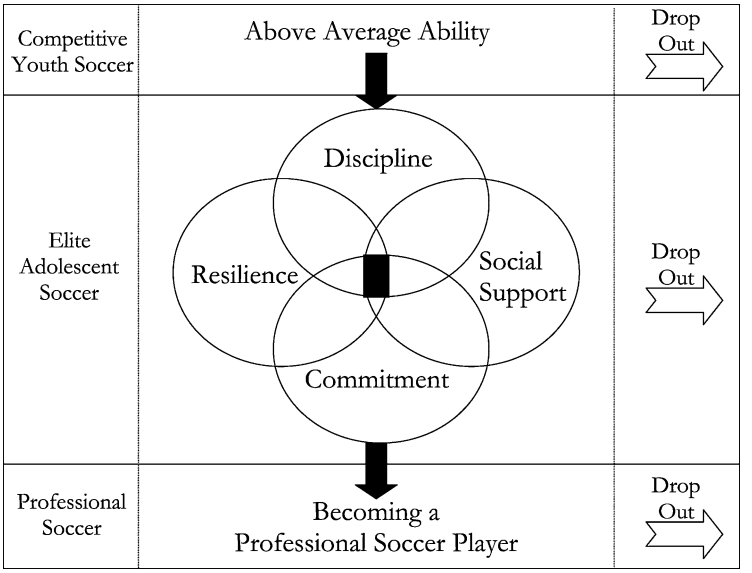

Figure 2. A grounded theory of the psychosocial competencies and environmental conditions associated with soccer success during adolescence.

theory model. These experienced 'member-checking participants' were engaged in informal interviews during which they were provided with examples of the emerging theoretical model (which eventually became the model presented in Figure 2). During these member-checking interviews, the emerging model was explained to the member-checkers and they were asked to locate their own experiences within the framework. These participants then provided feedback concerning the coherence of the developing model and the extent to which the findings reflected their own experiences.[4]

RESULTS

Results revealed four central psychosocial competencies: *Discipline*, *Commitment*, *Resilience*, and *Social Support*. Each of these psychosocial competencies are described and explained using subcategories and associated concepts. An overview of the results is presented in Figure 1, which is intended to represent how the concepts, subcategories, and categories were inter-related. Only data common to both samples are presented to add to the generalizability of the findings.

Discipline

Professional and international soccer organizations impose strict institutional demands (in terms of lifestyle and training) on their young players. As a result of these institutional demands,

[4]Interviews with the experienced soccer players were not audio-recorded, nor were they subjected to the analytic coding procedures. Instead, these participants reflected on the structure and design of the emerging model. They did not provide raw data upon which the model was created.

players learned to display appropriate disciplined and dedicated behaviors. Discipline was described by the subcategories of conforming dedication and willingness to sacrifice.

Conforming Dedication

Conforming dedication represented ways in which young players complied with the institutional demands they faced. Players were required to demonstrate dedication both in their personal lives and sporting performances. Conforming dedication was reflected by the concepts of taking personal responsibility, obeying orders, and production.

Personal responsibility. Players thought that their coaches expected them to be personally responsible for their development and behavior. Indeed, an English coach said, "The coaches and myself are always giving this aura of 'you are responsible for your success. We are not the ones who will make you into a player"' (Coach 4). One set of activities that reflected how players assumed personal responsibility for their own development involved engaging in extra practice. For example, EP27 said, "it's physically hard to play at this level [so] I'd go to the park and put those sand weights on and kick the ball, and it made my legs a lot stronger." Personal responsibility was also demonstrated via off-field behaviors. CP12 said:

> You know some things are wrong, and some things are right. Don't do the wrong things. So if you are with a group of friends, and one of them is going to take [steal] something, stay far away, so when the police come they get him you are not there.

Obeying orders. Players understood that in order to be effective within the team setting they had to learn to follow instructions. Coach 3 explained his expectations:

> As a football club we try not to put up with any sort of nonsense. From 9 to 16 years old, you do as you are told, and if anybody steps out of line we won't sign them, because it's just a hassle that you don't need.

CP4, in reference to his professional club in England said: "They pay my wages, they tell me what to do. . . . They tell you to play wide, or play sweeper, you do it to the best of your ability." EP31 proposed the following formula as a way to secure a professional contract: "Short term I have to play consistently, long term I've got to do everything that they tell me to do really. I've got to do what they like."

Production. Elite soccer players are required to produce an effective performance with the desired result/outcome in the competitive setting. Coach 2 stressed the importance of a player's game performance in terms of assessing his progress: "The performance on Saturday is still crucial in all the eyes of all English coaches. It's the guide that everybody uses to make their assessments to choose the players." CP1 reflected on how he learned the need to produce. He said,

> I remember in one of the first games I got into, I was on a breakaway, I beat the goalie, and then the defender went behind the goalie to the goal line and I tried to put it between his legs. The coaches got mad and wanted to sit me, and I just had to think to myself, 'what am I doing?' I realized, just play the game and produce, because all they want is production.

Willingness to Sacrifice

Players reported that they sacrificed valued elements of their adolescent lifestyles in order to pursue a professional soccer career. Furthermore, coaches reported that such sacrifices were

an expected and necessary part of elite soccer. The reported sacrifices included family and friends/social life. It appeared that these sacrifices were willingly made because players were able to delay gratification.

Family. Time spent with immediate family was often sacrificed due to soccer commitments. CP3, who moved to England at the age of 15 years, reflected, "Moving away from your family is difficult. The biggest thing I've had to overcome is moving away from home." English players also reported that leaving home was a difficult sacrifice. EP31 said, "Moving away from home at 16 was hard . . . . The first day I came up here [to current club] it hit me. All the lads knew each other already before they came, and I came here, on my own, and I knew no one. It takes some time to settle in." Coach 5 had witnessed these sacrifices on numerous occasions and reported that "It's very difficult for them [young players], because they've not been living away from home before." CP14 summed up the family sacrifice by saying, "Basically you have to sacrifice everything including your family."

Friends/social life. Elite soccer players sacrificed their emerging social life to play and train. CP7 said:

> I often think about this. Growing up, I was always playing soccer, always training, trying to get better, going to training sessions. I don't know if I sacrificed growing up, my childhood. I definitely had fun, but I don't really feel I had a childhood.

CP2 thought the biggest sacrifice he made related to his friends, "when all your friends have a party to go to, and you have a game the next day, and you have to say 'no.' A lot of times that happens, and you just have to accept it." Similarly, EP23 said, "Sometimes my mates will be going out on a Friday night, but I can't go because I've got football, and you can't really go out too late in the week when you've got training." Coaches also thought that social sacrifices were necessary, and Coach 6 said players "must sacrifice their time with their mates. That's the times that they are going to have to really sacrifice. And it's hard, but they have to cut themselves off."

Delaying gratification. Successful soccer players appeared to realize that the rewards for their willingness to sacrifice were not gained immediately. CP6 justified the effort he was putting into becoming a soccer player in the following way: "How I look at it is that I've got one shot to do this, whereas I've got a lot of years to do a lot of other things." EP25 said, "If I want to be a professional footballer, I have to make those sacrifices now, but then later on in life, if I become a pro, then I know it's paid off." Likewise, CP8 said, "I just figured I'll live my fun life after I retire from soccer, instead of living a fun life minimally at this age. . . . I figure later on in life it will just be that much better."

Commitment

Commitment is used in this context to represent the motivational forces and psychological attachment underpinning the pursuit of a soccer career. Two sub-categories were used to describe and explain the commitment required by elite soccer players. First, several different types of motives were reported. Second, these motives were supported by strategically planned career goals.

Motives

Motives represent the reasons why players were involved in elite soccer. It was apparent that several different types of motives underpinned the pursuit of a professional soccer career.

Specifically, the motives reported here were love of the game, determination to succeed, perceived social status, and money.

Love of the game. EP24 said he played "just for the love of the game. If you love the game of football, you just want to play, and you just do it for the love of the game." The love of the game was fostered by dreams of being a professional player at very young ages. CP20 described his passion to play the game: "It's just my dream to play. I've grown up watching soccer, and it's my dream." Even a coach said becoming a professional player was "all I wanted to do for as long as I can remember."

Determination to succeed. A strong sense of determination was another important motive. Coach 3 said, "To make it as a professional footballer you've got to be very self-motivated, very disciplined, and you have to have a lot of determination. If you haven't got the determination to go all the way to the top, you'll just fall by the wayside." CP6 thought the factor that contributed most to his career was his "will to succeed, definitely. I have this desire just to be the best." Reflecting on the motivation of professional star players, EP33 said, "I think it's one of the things, it's their determination. Because they've got so much desire they are good professionals. . . . They've got that much determination."

Perceived social status. Players perceived that soccer success could be an avenue for gaining respect from friends, peers, and adults in the community. CP8 said: "There's a certain respect . . . from friends, or colleagues when I come back home. They will be asking questions, saying, 'I wish I had the chance to do that."' The lure of being famous (and the respect that fame appears to bring) was also an enticing motivational factor for some players. As EP32 said, "I just want to be known. I want to be on the pitch, and I want people to know who I am." Similarly, CP4 said one of the reasons he was involved in soccer was because "[soccer] will bring you fame, so people know who you are, and you're acknowledged."

Money. CP4 was forthright about the lure of financial rewards (in Europe): "Just seeing what it [soccer] could bring me. I know a lot of people aren't going to say it matters, but it could bring in the money." EP25 remarked, "it's good isn't it, getting loads of money for what you like doing?" Alternatively, some players reported that money was not a primary motivational factor, but rather a peripheral benefit. For example, CP13 suggested:

> The main thing is that you are happy and you want to play soccer. That's the number one thing. Making money and being very rich, it's sort of a bonus, it's just an addition. If you are happy to play the sport, that's the number one thing.

Ultimately, money acted as a motive for some players but its relative importance seemed to vary across individuals.

Career Planning Goals

In addition to the reported motives, players also appeared to strategically plan their soccer development in order to maximize their career progress. Three main types of strategic career development goals were reported: professional and international goals, playing up, and gaining exposure.

International and professional goals. Canadian players placed their international goals before professional club ambitions because playing for Canada was viewed as a vehicle toward securing a professional career. For example, CP7 said he was "trying to make this under-20 national team. I want to play for Canada, that's been a goal for . . . since I was 15. That's my biggest goal right now, my most immediate goal." In contrast to their Canadian counterparts, English players perceived that becoming a professional with a good club was a vehicle to becoming an international. For example, EP27 described how international ambitions appeared to follow professional ambitions for English players, and he said, "My long term aim is to get into the reserves and then into the first team at T_____[his current team]. Beyond that, it's to play for England."

Playing up. Players sought to maximize their career development by playing in older age groups. CP17 said, "I always played up in age groups to get better competition. . . . It's good for me because most of them are bigger than me." CP1 thought:

> The thing that helped me out the most was that I never played in my age level. I was always moving up. I played for the junior high team when I was in elementary school. As soon as I turned 16 I went to go and play with the men.

EP33 summarized the benefits of playing up: "You play against better players. Playing against better players will make you become more able, and you know what's coming up if you do play in the first team."

Gaining exposure. Gaining exposure to appropriate training and competitive environments was a matter of either selecting a top level club with excellent training facilities and high quality coaches, or choosing a lower level club where the player believed he would have a better chance to play in the first team. EP30 discussed his decision to sign with one of the largest clubs in the country and said,

> Everything is better here. As far as I'm concerned, I can come here and if things don't work out I can go to one of the lower leagues, and I'm still getting the best three years of coaching that's possible.

Alternatively, a coach said that he advised players:

> . . . not to go to Man U or Liverpool [i.e., two of the highest-profile clubs in England] because if they want a player they buy him. Clubs like mine, we need the youth players because we haven't got 5 or 6 million pounds for a player.

Resilience

The term resilience is used here to reflect the ability to bounce back after adversity. Specifically, resilience was described by the ability to overcome personal and contextual obstacles. Players reported that they used positive coping responses to manage the demands of elite soccer.

Overcoming Potential Obstacles

It appeared that players had been faced with obstacles that they were required to overcome in the pursuit of soccer success. One common obstacle was perceptions of parental pressure. Canadians cited that they experienced difficulty in being accepted overseas. Alternatively, English players reported that overseas players presented an obstacle to their development.

Parental pressure. Parental pressure was reported as a potential obstacle in soccer talent development. For example, the father of CP13 tried to push his son to train when he was injured: "Sometimes I would like him to back off. Sometimes my brother would have to start arguing with him to lay off me, and then he would get mad at my brother." CP13 perceived pressure from his parents because "they want to live in us, because they didn't get the chance to do what we get to do. They feel that we can go on further [so] they want to push and push." Similarly, Coach 5 thought that the parents of English players could be a problem: "Parents push too much. Parents will push and push and push, and if you just watch youngsters playing on a Saturday, it's the parents just wanting to live their life through them." Coach 1 reiterated this, and said, "as soon as the parents put a name on a registration form, they think that is it, a multi-million pound contract, but that's not what we are about, we offer a very good football education program."

Overseas players. Canadian players reported that they had to move to Europe to pursue their soccer career, but they faced a difficult period of acceptance in Europe. For example, CP3 said:

> Well, the first time I went over [to Europe] I was only 14, and they used to do things to me. Like in the shower they'd pee on me, and all types of stuff like that . . . but you just get through it.

Reinforcing the Canadian obstacle of acceptance overseas, English players reported that overseas players could be an obstacle to their development. EP23 felt he had missed out on the chance to develop his technical skills when he was younger: "There is a rule that Brazilians are not allowed to play matches until they are 14, so they have got so much time to practice. If we had practiced like they did from 7 years old . . . [we would be better technically]." Finally, EP22 expressed his main concerns with overseas players: "[We have] too many. We are working hard to get through, and they just come in. It should be restricted, the number of foreign players per club."

Coping Strategies

Players used two situational coping strategies to manage the pressures of their involvement in elite soccer environments. First, players reported that it was important to respond positively in training and competitive situations. Second, participants reported the importance of having the confidence to thrive on pressure.

Positive responses. Young players need to be able to react appropriately to mistakes and criticism if they are to make progress as a professional soccer player. CP12 explained how he reacted to a mistake:

> I try not to get mad at myself, just to keep trying, because sometimes people will make mistakes. It's hard when it happens, but you have to put it right behind you. [The national team coach] is looking for you not to put your head down after you make a mistake, just lift up your head and try again.

Similarly, EP27 had a mature view of the role of mistakes in his development as a player:

> I'm only young, and I'm going to make mistakes. If I never make a mistake, I'd be playing for the first team. If I make a mistake I don't kill myself over it, I think that the next time I'm going to make sure I do it right, rather than worry about it. I'll try to do something brilliant the next minute.

Confidence to thrive on pressure. To succeed in elite soccer, players must not only be able to cope with pressure, but in some sense they must learn to thrive on their perceptions of pressure and use it to their advantage. For example, CP4 expected to make a telling contribution to a game when the situation was most critical:

> If it's two-two in the cup final, and you are in the last minute, I expect to be the one to score the winning goal. I want to be the one that creates it, and I expect to be it, because of what I have done, from [since I was] young, and being myself.

EP26 agreed: "I always seem to play better when I'm confident. If you feel good about what you have to do, then it always seems to come off better, it always seems to happen." CP8 said, "I like the pressure situations where the game is on the line, and you are not supposed to win. . . . It is my chance to step up and show everybody I am worth it when people might doubt me."

Social Support

The ability to perceive and use available sources of social support also appeared to help players overcome obstacles and develop resilience. Players benefited from three different types of social support: Emotional, informational, and tangible support (cf. Cutrona & Russell, 1990). It was clear that the most important providers of social support were parents, but the respective support functions fulfilled by mothers and fathers differed.

Emotional Support from Parents

Emotional support is the ability to turn to others for comfort and security during times of stress, so that a person may feel cared for (Cutrona & Russell, 1990). CP19 said he was supported by "Practically my whole family. They are always calling me, asking me when my next trip is, wishing me luck." CP15 said,

> My parents will never say 'you have to do this, you better make that team.' They say that I better get my good grades, but in soccer they never tell me. They say, 'if you want to stop now, stop now, it's up to you. But we are there to support you should you decide to carry on.'

EP26 explained, "My Mum and Dad help me a lot. I still live at home with my Mum and Dad and they support me with my soccer a lot." EP29 said he felt support from his entire family: "All my family . . . they come over to watch me play [from Northern Ireland]. It's hard being away from home, but I speak to them on the phone, and they encourage me every day."

Informational Support from Fathers

Informational support provides individuals with advice or guidance about possible solutions to problems (cf. Cutrona & Russell, 1990). It became clear that it was usually the father who played the most important role with respect to providing his son with soccer advice. CP18 said, "My Dad used to talk to me about soccer. He played defense, and he used to tell me stuff about playing the position." EP26 explained how his father helped him: "He comes to all my games and he gives me advice on what I'm doing." Similarly, EP33 said, "my Dad has been the influential one. He gives me a lot of good advice. He played when he was younger, and he was a very good player, so he knows the game." Many of the fathers of players in this study were reported to have played soccer when they were younger, and as such had some experience and advice to offer.

Tangible Support from Parents

Tangible support relates to concrete assistance given to a person to help him or her cope with a stressful event (cf. Cutrona & Russell, 1990). Both parents provided tangible support primarily in the form of travel assistance and financial backing. CP5 described how his parents worked as a team to help him: "They drive me everywhere, pay for me, pay for my plane tickets if I go back to England or somewhere else [to play soccer]. They support me a lot." While the father of EP31 was responsible for negotiating with clubs, "he also had to work, so my Mum ran me around to the games when he was working. My Mum has actually been at games more." Financial support was also important. For example, because of his soccer commitments, CP15 was unable to work "so my parents motivate me to stay on the team, stay healthy, travel, train as hard as you can, and they look after the money." Both parents shared the responsibilities for providing tangible support for their children.

DISCUSSION

Using Previous Research to Assist in Theory Development

The data described in the Results section were derived via a process of inductive analysis and verification that resulted in the identification and construction of four psychosocial competencies associated with elite youth soccer success. The next step in the development of the grounded theory (that is presented later) required the comparison of current findings with previous research. As stated earlier, an exhaustive literature review was delayed until this latter stage of theory development. When the inductively derived scheme of interrelated concepts, sub-categories, and categories was complete (i.e., Figure 1), it was contrasted with existing theories and literature in the area of talent development. The use of previous theory and research in this manner is consistent with grounded theory methodology (Creswell, 1994; Strauss & Corbin, 1998), and has been used before in the published qualitative literature (e.g., Creswell & Brown, 1992). The discussion of the four psychosocial competencies that follows represents the integration and comparison of the inductively derived findings with previous research and theory.

Discipline

The category of discipline encompasses the notion of deliberate practice suggested by Ericsson et al. (1993). That is, adolescent athletes were disciplined in several areas of their lifestyle, and this enabled them to fulfil the demands of extended deliberate practice. Previous research has identified that elite adult athletes possess discipline (Bloom, 1985; Donnelly, 1993; Vernacchia et al., 2000). We found that discipline in adolescence involved conforming to the institutional demands of the sport and making personal sacrifices in valued areas in an adolescent's life (i.e., family and social life). The players in this study appeared to adopt similar behaviors and attitudes to those displayed (and expected) by their adult counterparts. Developing personal responsibility for behavior reflects the increasing independence and responsibility that is normally associated with adolescence (Brettschneider & Heim, 1997).

It was also significant that the players limited their social interactions with friends. The peer group tends to become more important during adolescence (Coleman & Roker, 1998), and peers generally play a positive role in providing support to elite adolescent performers (Patrick et al., 1999). However, the demands of elite sport may also necessitate the constraint of social interaction with peers (Bloom, 1985; Donnelly, 1993; Gould et al., 2002). Players in the present study were able to make sacrifices and delay gratification because they realized and valued the potential benefits that could be attained in the future. Similarly, Ericsson et al.

(1993) argued that because deliberate practice does not generally lead to immediate social or monetary rewards, individuals must be willing to delay gratification to overcome motivational constraints. The current findings provide important information about the specific phase of adolescent elite performance and the associated psychological impact of being involved in intensive training.

Commitment

Motivational factors such as industry, desire, and determination are associated with the attainment of high abilities (Howe, 1999). Uncovering motivational factors which enable young people to engage in the years of practice needed to become an expert performer is a crucial area for investigation (Durand-Bush & Salmela, 2001; Ericsson, 1996; Starkes, Helsen, & Jack, 2001). The concept of commitment presented here represents a psychological attachment that enables adolescent athletes to maintain a disciplined lifestyle, and is consistent with the operational definition and antecedents contained in the sport commitment model (Scanlan, Carpenter, Schmidt, Simons, & Keeler, 1993). As such, the category of commitment reflects motives that athletes use to overcome motivational constraints (Ericsson et al., 1993).

Love of the game reflects intrinsic factors underpinning soccer success. Perceived social status reflected social (approval) goals that are important achievement motivation constructs (Urdan & Maehr, 1995). Indeed, Scanlan, Stein, and Ravizza (1989) noted that the social recognition of competence was a characteristic feature of sport enjoyment reported by former elite figure skaters. Similarly, sport sociologists have identified the importance of gaining respect as a motive underlying the pursuit of athletic careers (Donnelly, 1993). Finally, money appeared to reflect extrinsic rewards among the current sample of players. In conjunction with these motives, strategically planned proximal and distal goals provided direction for the career aspirations of the athletes in this study. The ability to set and achieve goals has also been identified as a characteristic of successful Olympians (Gould et al., 2002). Together these motives and goals indicate that individuals possess idiosyncratic reasons for pursuing soccer careers that may include intrinsic, extrinsic, and social factors.

Resilience

Although resilience has yet to be extensively examined in sport, the ability to overcome adversity has been previously identified as an important element in the development of elite track and field athletes (Durand-Bush & Salmela, 2002; Gould et al., 2002; Vernacchia et al., 2000). Similarly, Howe (1999) proposed that high achievers must maintain their motivation after experiencing failures. The current study identified certain situations (i.e., potential obstacles) that required resilient behaviors and the use of coping strategies in competitive settings. As such, resilience was presented as a set of behaviors associated with soccer success rather than a personality trait. Further research is required to establish the generalizability of resilience across settings if it is to be viewed as a trait (as opposed to a set of situational behaviors) associated with sporting success.

Youth sport research shows that parents can have negative influences on their child's sport participation when they become over-involved and put unreasonable pressure on their offspring to achieve (Barber & Sutko, 1998). It appears that the players in this study were generally able to cope with perceived parental pressure, but it is also possible that the majority of athletes' parents were generally supportive. Adolescence is typically characterized by increasing independence from the family as the peer group becomes more influential (Coleman & Roker, 1998). However, adolescent players in the current study reported sacrificing time with peers while benefiting from a range of supportive parental behaviors. This suggests that parents

continue to play an important contributory role in the development of elite athletes during adolescence.

Social Support

Previous research has suggested that fathers play a more significant role in shaping adolescents' sporting aspirations than mothers (Jodl, Michael, Malanchuk, Eccles, & Sameroff, 2001). It seems reasonable to suggest that the fathers of athletes in this study were able to provide informational support because they had prior personal involvement in soccer (whereas the mothers had not). However, both parents worked together to provide emotional and tangible support. As such, the availability and use of support from both parents may have differed in terms of the specific support function, but overall parental support appeared to help the adolescent athletes cope with the associated pressures of elite sport.

Toward a Grounded Theory

It is useful to place results within an organizational framework that is coherent with the extant literature to see where and how a theory fits (Strauss & Corbin, 1998). The comparison of current inductively derived findings (i.e., Figure 1) with previous talent development literature facilitated the final theoretical integration presented here (i.e., Figure 2). Previous research and theory was useful for building this grounded theory in three main ways. First, there was general support for each of the four reported psychosocial competencies in the existing talent development and youth sport literature. Given that the four psychosocial competencies were inductively developed, the fact that they were subsequently corroborated by previous research indicates that the findings are relevant to talent development in youth sport. Second, the idea to incorporate four interlocking rings in the model design was adapted from Renzulli's (1986) three-ring conception of giftedness. That is, the *design* of Renzulli's model was incorporated into the final grounded theory (rather than the *content* of Renzulli's model, which is essentially a definition of educational giftedness).

Third, several researchers (e.g., Bloom, 1985; Côté, 1999; Glaser, 1996) have suggested that there are distinct stages of talent development, and this notion was incorporated into the final grounded theory (Figure 2). The stage concept was also based on research showing that above-average ability (often represented by relative age advantages whereby older children in age-eligibility groups are chosen for higher levels of performance) is particularly relevant to success in soccer (e.g., Barnsely, Thompson, & Legault, 1992). Therefore, the adoption of a three-stage framework (i.e., reflecting the stages of youth, adolescent, and professional soccer) is the result of integrating current findings with previous talent development research.

Toward a Grounded Theory of the Psychosocial Competencies and Environmental Conditions Associated with Becoming a Professional Soccer Player

By comparing current findings to existing theory and research we were able to create a grounded theory of the psychosocial competencies that appear to be related to success in soccer. Overall, it appears that becoming a professional soccer player involves the successful negotiation of three developmental stages (see Figure 2). In the first stage, children must demonstrate above average technical ability to join a professional club. The second stage represents the period when an adolescent player joins a professional organization. If adolescents demonstrate the necessary qualities during the second stage, they have the best opportunity of being selected to become a full-time senior professional player (Stage 3). Thus, stages one

and three are presented to demonstrate the environmental conditions that contextualize the theory. The theory presented here details transitions that occur during the second stage of development. Findings suggest that the best opportunity to make the transition to professional adult soccer will be gained through the development of discipline, commitment, resilience, and the perceived availability and use of social support. In other words, it is the interaction of these four factors that is theorized to optimize success in soccer.

It is likely that technical ability per se does not predict selection to professional adult soccer. Therefore, if players are able to attain, foster, and utilize the four psychosocial competencies in conjunction with each other (i.e., the middle interlocking area of the four rings presented in Figure 2), it is proposed that they will have the greatest likelihood of being selected for professional adult soccer. If a player maintains a disciplined lifestyle, makes the necessary sacrifices, develops a strong commitment, is able to rebound from setbacks, and receives adequate support, he potentially increases his chances of moving on to the next level. If not, it is more likely that he will (a) stay where he is until these conditions prevail, (b) be released from his club (in which case he may re-enter the sport at a lower level), or (c) drop out. To reiterate, the middle overlapping area of the four rings in the model (i.e., Figure 2) is theorized to be the crucial element for progressing in elite soccer.

CONCLUSION

We presented a qualitatively-derived theory systematically developed from empirical data using the analytic processes of description, conceptual analysis, and theorizing associated with grounded theory methodology (Strauss & Corbin, 1998). Theories can take many forms, varying in terms of their sophistication, structure, and modes of derivation. We presented a substantive theory (Glaser & Strauss, 1967) which is intended to reveal structures of knowledge and intricately linked concepts among stages and phases of a process. Such theories are only generalizable to other contexts and other participants experiencing similar phenomena.

Given that theory is an ongoing work in progress rather than established fact (Morse, 1997), research is required to modify and/or extend the present theory in order to establish its validity and generalizability. Of course, there are no guarantees that the participants in this study will go on to achieve success as professional soccer players, which highlights the importance of future research that is sensitive to different stages in the development of exceptional abilities. Further research may include investigations with individuals involved in different talent development systems (i.e., in other countries) and different sports. Most important, longitudinal research that follows successful and unsuccessful players during the course of their early careers is required to test the validity of the model and the prediction that the interaction of the four psychosocial competencies leads to the greatest likelihood of becoming a professional adult soccer player.

Several recommendations for applied sport psychology practitioners are suggested. The category of discipline may be useful for helping athletes understand the demands of a professional sport lifestyle, and helping them to realize more about the nature of dedication and sacrifices associated with elite sport. For example, the importance of production in the game situation and the need to meet coaches' standards and behavioral expectations was emphasized. On the surface, this may seem like an obvious point. However, players who fail to understand these factors are at risk of jeopardizing their chances of obtaining a professional contract. The general public and media may enjoy watching a player who impresses the crowd with flamboyant

skills, but players are judged on their ability to achieve performance objectives (e.g., to score a goal or stop a shot). Players who fail to understand this may not make the expected career progress. Although we are not advocating the suppression of creative or skillful play, we are suggesting that developmental players should be made aware that the time and place for such actions may not be on game day (where the ultimate goal in professional sport is to win the game).

Given the increasing influence of the peer group during adolescence (e.g., Coleman & Roker, 1998), it is conceivable that some players may not recognize the impact that an overly-active social life away from the competitive environment may have upon their readiness to compete or train. We showed that elite soccer players must resist negative peer influences and sacrifice valuable areas of their social lives. Again, we are not suggesting that players isolate themselves from their friends, but we are advocating that players should be educated about the sacrifices that are required to play and train at the elite level. Thus, the information provided here has specific applied implications for structuring elite adolescent athletes' lifestyles in a manner that is conducive to sporting success. Given that so many talented young players are vying for so few professional contracts, players must understand how best to structure their lifestyles to optimize their opportunities for career development.

If athletes appear to lack commitment to their sport, practitioners may wish to use the information provided here (as it pertains to motives and career planning goals) as a basis for intervention. For example, the practitioner could have the athlete list his/her personal motives for pursuing a sport career and then compare them with the current findings. The importance of a range of intrinsic, extrinsic, and social goals was reinforced here, and this could provide guidance for practitioners.

If the athlete does not perceive adequate levels of social support, practitioners could implement interventions to increase the levels of tangible, informational, and/or social support provided by significant adults. Such interventions could involve athletes and parents working together to identify which types of support they feel that they respectively experience or provide. Resulting discrepancies could be identified and potential steps to overcome some of these difficulties could be developed. For example, some parents may feel that they provide positive (informational) social support for their child via feedback after games. Yet for some players, this feedback may be perceived as threatening rather than supportive. This may become a situation where a coach or sport psychologist could become an important liaison between athlete and parent. Alternatively, an athlete may perceive adequate social support, but experience difficulty overcoming setbacks. In this case, a practitioner could use the grounded theory presented here as a starting point for teaching individual coping strategies (e.g., positive reactions to mistakes) in order to build resilience.

Ultimately, the model as a whole may be more useful than the individual competencies. For example, it may be possible to identify children who possess high levels of discipline, commitment, resilience, and social support for selection to more elite levels of training and competition. Alternatively, the model may serve as a diagnostic guide for interventions with elite youth athletes who are not making the expected career progress. In such cases practitioners could use this grounded theory to help identify areas where educational initiatives could be implemented (i.e., the practitioner may wish to consider if the athlete is experiencing difficulties relating to discipline, commitment, resilience, or social support). It must be noted that the current model is intended to provide guidance (rather than prescriptive information) for practitioners. It is hoped that the grounded theory presented here will assist in the development of sport educational programs that are sensitive to the needs of young athletes.

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