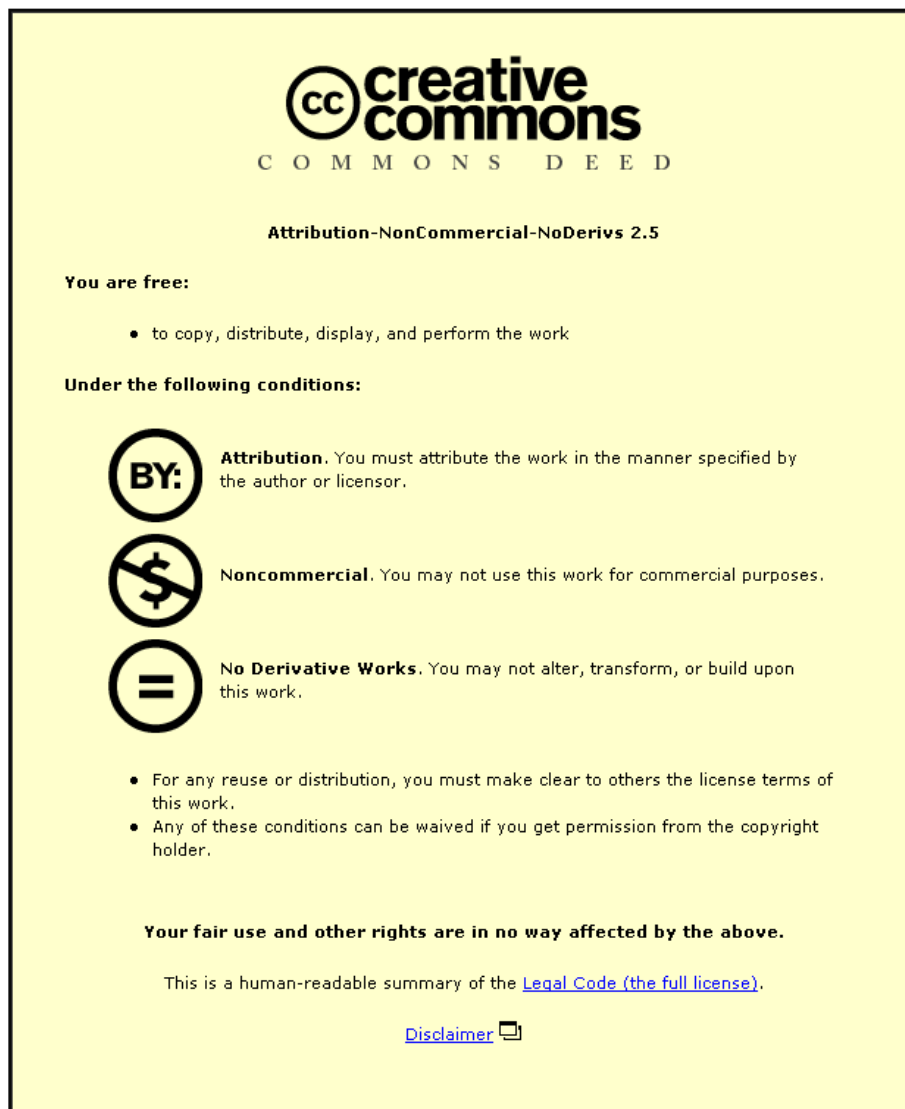




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
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**POSITIVE YOUTH DEVELOPMENT IN SWIMMING:  
THE ROLES OF COACHES AND PARENTS**

**By**

**Julie Johnston**

Doctoral Thesis

Submitted in partial fulfilment of the requirements for the award of  
Doctor of Philosophy of Loughborough University

March 2014

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To Michael...who said I couldn't because he knew how to make sure I could

&

To Caleb...chase your dreams, follow your heart and always have the confidence to  
choose the path less travelled.

This is for you both.

## Acknowledgements

To this day, I still hold three individual Irish records in swimming, yet the two hardest things I would say I have ever done in my life are becoming a parent and completing my PhD, most probably made harder by the fact that I chose to do it in that order!! However, I know that I would not have succeeded in completing this thesis if it were not for the love and support of my family, friends and colleagues.

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Most importantly, however, I would like to thank my best friend and husband, Michael. I would never have started (or ended) this journey without you and, at times, I did not know if I ever should have but writing this today I know it has been one of the hardest but best things I have ever done...now it's your turn...

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change it for the world. Caleb, I love you to the moon and back and I hope this thesis can be an example to you that anything is possible with hard work, dedication and the love and support of others. Michael and Caleb, this is for you both.

## List of Publications Arising From This Thesis

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**Johnston, J.P.**, Harwood, C.G., & Minniti, A.M. (2013). Positive youth development in swimming: Clarification and consensus of key psychosocial assets. *Journal of Applied Sport Psychology*, 25, 392-411.

### Conference Proceedings

**Douglas, J.P.**, Minniti, A.M., & Harwood, C.G. (2011). *Coach attitudes towards and perceptions of positive youth development in swimming*. Paper presented at 13th European Congress of Sport Psychology. Madeira, Spain, July 2011.

**Douglas, J.P.**, Harwood, C.G., & Minniti, A.M. (2010). *Psychosocial assets of positive youth development in swimming*. Invited speaker at Institute of Youth Sport Annual Conference: Researching Youth Sport. Loughborough, United Kingdom, October 2010.

**Douglas, J.P.**, Harwood, C.G., & Minniti, A.M. (2010). *The psychosocial assets of positive youth development: A developmental framework for sport*. Paper presented at Association for the Advancement of Applied Sport Psychology Conference. Providence, Rhode Island, October 2010.

**Douglas, J.P.**, Harwood, C.G., & Minniti, A.M. (2010). *The psychosocial assets of positive youth development: A developmental framework for sport*. Poster presented at School of Sport, Exercise and Health Science open evening, Loughborough University, United Kingdom.

**Douglas, J.P.**, Harwood, C.G., & Minniti, A.M. (2009). *The psychosocial assets of positive youth development: Preliminary findings for a developmental framework for sport*. Presented at the International PhD Course: Psychological Aspects of Talent Development. Copenhagen, Denmark.

## **Abstract**

Positive youth development is a holistic approach that considers both internal (e.g., life skills and positive psychosocial characteristics) and external (e.g., coach and parent) developmental assets. The positive youth development framework has largely been used to examine multi-sport and recreational/high-school level programmes as a means to understand how participation within these environments can contribute to positive psychosocial development. The aim of the present thesis, comprised of four distinct studies, was to understand how a positive youth development approach might be applied to and integrated within the performance environment of British swimming.

Study 1 comprised a two-stage investigation focused on identification and consensus related to a specific set of psychosocial assets appropriate for swimming. Following a content analysis of existing literature, a dialectical methodology was utilised to interview a panel of 10 experts from professional (coach and practitioner) and academic fields within swimming and youth sport. Five higher order categories containing 17 internal assets emerged; namely, self-perceptions, behavioural skills, social skills, approach characteristics and emotional competence. In Study 2, coaches' (n=181) attitudes towards and perceptions of the 17 psychosocial assets were examined via a bespoke quantitative survey. The five-factor higher order model that emerged from the first study was quantitatively tested and supported. Coach characteristics were also examined regarding coaches' overall value of the assets. Results indicated that assets within self-perceptions, behavioural skills and approach characteristic groups were more valued than those within social and emotional categories. Full-time, paid coaches provided higher value ratings for all asset groups compared to part-time, volunteer coaches.

Study 3 replicated and extended Study 2 by examining attitudes of British swimming parents (n=249) towards the psychosocial assets, in conjunction with perceptions of their parenting style and levels of social support provided to their children within a swimming environment. Structural equation modelling was used to test hypothesised relationships between parental perceptions of parenting style, social support availability and value placed on the five internal groups of assets. Results indicated that parents' asset value profiles were very similar to those of swimming coaches, with swimming specific assets of self-perceptions, behavioural skills and approach characteristics valued more than the less specific assets within social and emotional subgroups. Further, parents who reported high levels of esteem support also placed greater value on all assets apart from self-perceptions, and parents who reported a warm style were more likely to provide this esteem support.

Finally, Study 4 examined perceptions of autonomy supportive coach and parenting styles and social support availability in addition to motivational goal orientation, perceived sport competence and self-esteem in a sample of 246 swimmers. Hypothesised relationships between coach and parenting style, perceived social support availability and the asset related outcomes were tested using structural equation modelling. Results revealed that autonomy supportive coach and parenting styles both positively predict respective perceptions of social support availability. Athletes also reported that coach social support positively predicted both task and ego orientation, while parental emotional support positively predicted task orientation only. Both task and ego orientation positively predicted perceived sport competence which, in turn, positively predicted self-esteem.

Overall, the findings of this thesis revealed a comprehensive list of internal assets that were highly valued by both coaches and parents, although the assets contained within the social and emotional groups were valued to a lesser degree, prompting calls for greater awareness on the relevance and applicability of these assets within British swimming. Furthermore, the styles that coaches and parents operate within positively predict the types of perceived social support availability which, in turn, predict internal asset value and level. Specifically, an autonomy supportive coaching style and a parenting style characterised by a high degree of warmth are both thought important elements to promote, with parental esteem and emotional support found to be most related to internal asset value and level, respectively. Links between social support, motivational goal orientation, perceived sport competence and self-esteem were also tested and supported. Overall, therefore, this thesis provides a unique contribution to the sport psychology and positive youth development literature by illustrating key areas of development (i.e., the internal assets) and by demonstrating one mechanism through which a degree of this development occurs (i.e., social support).

*Keywords:* Positive youth development, swimming, youth sport, assets, social support



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# Chapter One

Introduction

Sport has long been presented as the ideal arena for young people to participate in, aiding in their physical, psychological, emotional, social, and even intellectual development (e.g., Fraser-Thomas, Côté, & Deakin, 2005). Such development has been purported to arise from the opportunities that sport provides for young athletes to acquire positive character traits such as increased self-awareness, goal setting, time management, and emotional regulation skills (Dworkin, Larson, & Hansen, 2003). Other characteristics include positive peer relationships, leadership skills, and a sense of initiative (Côté & Hay, 2002). However, there is also evidence that negative outcomes are associated with sport, such as increased alcohol consumption, burnout, and increased aggression via low levels of moral reasoning (Eccles & Barber, 1999; Gould, Tuffey, Udry, & Loehr, 1996; Shields & Bredemeier, 2001). Athletes also report feelings of excessive pressure to win, a lack of attachment to their teams, and low perceptions of abilities (Wankel & Mummery, 1990) leading to decreased self-confidence and self-esteem (Martens, 1993; Wankel & Kreisel, 1985).

Anecdotal evidence perpetuates this bilateral view of sport participation, with the many positive success stories of athletes' involvement in sport often being told through the eyes of the media in autobiographies, interviews, and even movie deals. However, all too often we are reminded of the fragile nature of the success that our top sporting heroes experience and the dark demons that many of them fight. Recently, swimming legend Ian Thorpe shared his battle with what he described as "crippling depression"; and in his recent autobiography he admitted to severe alcohol abuse between 2002 and 2004, a period of time in which he was training to defend his Olympic titles (Thorpe & Wainwright, 2012). Although it may seem at odds to relate a serious condition such as depression to involvement in elite level sport, it is important to explore the full breadth of what sport might contribute to an athlete's psychosocial health and well-being, if we are to fully develop athletes as individuals.

### **Psychosocial Development in Sport**

In 2014, a psychologist from the New South Wales Institute of Sport, Gerard Faure-Brac, commented on the Thorpe case, noting that:

Although we train these athletes and give them everything [they] need to be able to do their job in the pool, or on the track or on the field completely...we often miss out on preparing them for those other aspects of life that they're going to need outside of the sporting arena (as cited in Hoh, 2014).

Faure-Brac is referring to the development of athletes' life skills, an area of research that has received much attention in recent years, primarily within the United States. Two lines of investigation have dominated the literature in this area. The first is concerned with bespoke programs that look to develop key characteristics within participants and consider the most effective ways to do this; for example, Going for the Goal (Danish et al., 1998), Sports United to Promote Education and Recreation (SUPER; Danish, 2002), Play It Smart (Petitpas, Van Raalte, Cornelius, & Presbrey, 2004), and First Tee (Weiss, 2006). The second considers the outcomes and effectiveness of existing programs and seeks to understand athlete experiences (e.g., Gould, Collins, Lauer, & Chung, 2007; Holt, Tink, Mandigo, & Fox, 2008; Lacroix, Camiré, & Trudel, 2008).

More recently, a third line of investigation has emerged that has enveloped life skills research, with the aim to bridge the gap between theories and concepts that have been developed within sport psychology and those developed within more traditional psychological disciplines. This third approach has transferred the concepts and theories of positive youth development from the developmental psychology literature into the sport domain (e.g., Fraser-Thomas et al, 2005; Petitpas, Cornelius, Van Raalte, & Jones, 2005).

Positive youth development theorists state that every young person has the potential to develop in a constructive and positive manner, which is a reversal approach to previous literature that focused on adolescence as a period of storm and stress (e.g., Roth & Brooks-Gunn, 2003). As such, positive youth development has been applied to develop community and youth support programs to assist in preventing teenagers from participating in deviant behaviours such as alcohol and drug abuse, crime, and/or teenage pregnancy. However, positive youth development is not simply about preventing these behaviours; rather, it is about working with young people to assist in the development of positive qualities and characteristics, known collectively as internal assets. Whilst positive youth development interventions have commonly focused on youth and community settings, recent research has considered the advantages and possibilities that sport can offer for positive youth development (e.g., Côté, Bruner, Erickson, Strachan, & Fraser-Thomas, 2010; Holt, Sehn, Spence, Newton, & Ball, 2012; Jones, Dunn, Holt, Sullivan, & Bloom, 2011).

## **Positive Youth Development in Sport**

Whilst researchers agree on the applicability and relevance of positive youth development to sport, disparity remains regarding which specific internal assets should be the focus of development. The research in the area has developed in such a way that there are a number of different models, frameworks, and context-specific terms all being brought together under the umbrella of *positive youth development in sport*, leaving us with a confusing array of concepts and constructs on which to focus. One way to address this issue and reach agreement could be through investigation of a sport-specific approach. That is, much of the prior research looks at multi-sport environments, yet different sports and their related environments provide diverse opportunities for development in alternative areas and perhaps even require differing core psychosocial skills. Therefore, a sport-specific approach seems the most logical, both for making sense of the way in which the assets are described (e.g., so coaches and athletes understand ‘the language’) and for ensuring applicability of the research. Furthermore, the majority of prior research in this area has focused on relatively recreational sporting situations that occur in school sport environments or in bespoke programs (e.g., Camiré, Trudel, & Forneris, 2009a, 2009b; Lacroix et al., 2008). Much less research has focused on the effects of participating in a performance environment, and specifically from a young age, on the development of these internal assets (Strachan, Côté, & Deakin, 2011).

## **Positive Youth Development in Swimming**

Swimming provides the ideal context within which to investigate these issues as it is a sport that attracts relatively large participation numbers (1,151 registered swimming clubs in England alone, with 192,765 registered competitive swimmers; ASA, 2012), and it requires participants to commit to a heavy training load from a young age. Swimmers report spending between 16 and 40 hours a week in training (UK Sport, 2008), and British Swimming policy in 2001 indicated that the typical elite age-group/youth swimmer (i.e., 12-18 years  $\pm$  1 year) was required to commit to an average of nine, 2-hour swim sessions a week for 48 weeks of the year. A minimum training requirement of 44 - 52 kilometres per week was also stipulated, with middle distance and distance athletes being asked to target closer to 60 kilometres a week (Atkinson, 2001). Furthermore, as an ex-international swimmer who enjoyed a relatively successful career, swimming was a conscious choice of sport within which to explore these ideas, largely due to my in-depth knowledge and understanding of swimming in addition to a desire to

initiate positive change within the sport. As a largely prescriptive sport in which coach interactions are predominantly autocratic in nature, it was my belief that young swimmers were missing out on developing important internal assets through the absence of a focused approach to such development. This concern was heightened by the growing evidence base of Côté and colleagues' research, which outlines development of elite performance by way of an early specialisation pathway (e.g. Côté & Fraser-Thomas, 2007; Côté, Strachan, & Fraser-Thomas, 2008), and the problematic likelihood for swimmers who are in high-level competitive environments to follow similar career paths.

**Early specialisation.** Whilst a minimum mileage requirement no longer forms a part of current British Swimming policy, swimming has historically been viewed by many as a sport 'of the young'. Each Olympic Games has produced 'sensations' who first experience success as young as 14 years old, and who often go on to repeat such success at future Games. For example, Ian Thorpe became the youngest male ever to represent Australia at the age of 14, and his victory in the 400 meter freestyle at the 1998 Perth World Championships made him the youngest ever individual male World Champion. American Amanda Beard won three Olympic medals (1 gold and 2 silver) at Atlanta in 1996 – also at just 14 years old – and is often remembered as clutching her teddy bear both behind the blocks and on the medal podium. Meanwhile, Australian Leisel Jones won an Olympic silver medal aged just 15 years old in Sydney in 2000. More recently, in London 2012, 15 year-old American, Katie Ledecky, won Olympic gold and 16 year-old Chinese swimmer, Ye Shiwan, won two Olympic gold medals, smashing the world record for one of the events in the process. At the London 2012 Olympic Games, of the 13 individual gold medals up for grabs in the women's events, 10 were won by competitors under 23 years of age, and five of these were won by athletes who were between 15 and 17 years old.

Thus, swimming is still very much an early specialisation sport and many athletes who are successful are so from a young age. Indeed, Britain's Rebecca Adlington retired from the sport in 2013, at the relatively young age of 23, noting, "Katie Ledecky, who won the 800m, was 15 — I'm 23. It's not quite the same. I did feel old, it's sad to say. Female distance swimming is going a lot, lot younger. I certainly can't compete with that". Rebecca went on to say, "I've noticed over the past few years I can't do the same level of work as I used to. I need a lot more rest and recovery" (as cited in Whitwell,



2013). These examples generate questions about the full effect of exposure to such a performance-focused environment from such a young age.

The high profile examples of Ian Thorpe, Amanda Beard, and Leisel Jones, all of whom have experienced success at a young age, and all of whom have revealed details of experiencing personal difficulties, would suggest that this environment may not be conducive to healthy psychosocial development. Although there is evidence to suggest that early specialisation in particular sports can be beneficial (Baker, Cobley, & Fraser-Thomas, 2009; Côté, 1999), researchers suggest that exposure to such a performance-focused environment from such a young age may have a detrimental effect on the positive benefits of sport participation, which can be gained from a more developmental approach (Bailey et al., 2009; Côté, 1999; Wylleman, Alfermann, & Lavallee, 2004). Important questions include: What happens to the volume of athletes who go through sporting systems unrecognised, having never achieved this level of success? Do these athletes leave the sports system with disparaging notions of sport's contribution to society? What legacy does sport leave those individuals? How likely are they to encourage their children to become involved in sport? What long-term consequences can be seen from such potentially negative experiences? Individuals who commented on Thorpe's situation have stated that his notoriety resulted in his struggle becoming public, but that there are most likely many more athletes who are less successful and struggle with similar issues.

**Focused approach.** The International Olympic Committee (IOC) Medical Commission issued a consensus statement in 2005 regarding *Training the Elite Child-Athlete*. In this, they list a number of physiological and psychological recommendations, of which one was the need for, "A comprehensive psychological programme including the training of psychological skills such as motivation, self-confidence, emotional control and concentration. The prescription applies strategies in goal-setting, emotional, cognitive and behavioural control fostering a positive self-concept in a healthy motivational climate" (IOC, 2005). Many people in sport still purport to the old adage that 'sport builds character' through mere participation (Gould & Carson, 2008), but the research would suggest otherwise. Indeed, numerous researchers have emphasised the importance of a focused approach to psychosocial development (e.g., Danish & Hale, 1981; Hodge, 1989; McCallister, Blinde, & Weiss, 2000), and Fraser-Thomas et al. (2005) presented the positive youth development framework as a model through which to do this.

**Important role of coaches and parents.** A key premise of positive youth development research that sets it apart from that of life skills is the focus on the external assets of development, namely the significant others in the environment and, in this case, coaches and parents. Indeed, the significant roles of coaches and parents within youth sport and talent development have been widely discussed since Bloom's (1985) foundational study, with further sport-specific evidence and models being developed over more recent years (e.g., Côté, 1999; Stambulova, 1994, 2000; Wylleman & Lavallee, 2004). The IOC (2005) also note the important role of coaches and parents in ensuring the appropriate provision of social support, and in exercising their judgement to ensure a balanced approach to sport participation that limits athlete exposure to stress and increases the opportunities for enjoyment.

### **The Present Thesis**

The purpose of this thesis was to explore the opportunities for growth and psychosocial development that positive youth development can offer in a swimming context. Whilst previous research has focused primarily on the *how's* and *what's* of positive youth development, this thesis is focused firmly on the *who's*, investigating key stakeholder perceptions of this fresh take on performance sport. Thus, the objectives of this thesis were:

- to establish the key internal assets necessary for young swimmers to attain through their development in the sport;
- to develop an understanding of coach and parent perceptions of these internal assets;
- to understand the precursors of parental perceptions of these internal assets; and
- to understand how coach and parent interactions may influence psychosocial development within swimming.

The remaining chapters aim to move the reader through the journey of exploration that I have travelled in investigating this complex and diverse field of research. Chapter Two provides an overarching literature review of the subject area being examined. The concept of positive youth development is introduced and operationalised for the purposes of this thesis and the notion of internal and external assets are presented. On a basis of this literature review, the first study in Chapter Three establishes the key internal assets that are considered important for development within a British swimming performance

environment. In the context of this thesis, this study is of primary importance as it was instrumental in informing and shaping the direction of the research described in later chapters. Studies 2 and 3 (Chapters Four and Five) make direct use of the assets presented in Study 1 via the formation of a bespoke survey for coaches (Study Two) and parents (Study Three) to gain an understanding of stakeholder perceptions of and attitudes towards the assets related to positive youth development in swimming. Finally, Study 4 (Chapter Six) investigates potential antecedents of asset development, namely, coach and parenting style and perceived social support, and investigates the level to which these predict the level of three of the internal assets, motivational orientation, perceived sport competence and self-esteem. Following these four chapters, Chapter Seven provides a summary of the thesis along with a discussion of key findings and practical implications. The limitations of the thesis and future directions for research in this specific area are also discussed.



# Chapter Two

Literature Review

The purpose of this chapter is to review the relevant positive youth development literature, beginning with a brief history of the field within its birthplace of developmental psychology before discussing its transition to and application within sport. The research within the closely aligned field of life skills is also discussed to present a detailed examination of the relevant literature within the wider field of psychosocial development in youth sport. Ecological systems theory provides the conceptual framework for positive youth development and is discussed in relation to its application in the field and the implications associated with a systems theory approach. The chapter concludes by providing an outline of future research advances that would serve to further progress the research in this area.

### **Positive Youth Development**

Positive youth development emerged in the developmental psychology literature in the early 1990s. The concept is predicated on the idea that every young person has the potential to develop in a healthy, positive manner and is in opposition to the predominant deficit theories of previous years, in which youth were regarded more as “problems to be managed” rather than “resources to be developed” (Roth & Brooks-Gunn, 2003, p.94). This problem-focused approach centred on the prevention of certain negative behaviours such as alcohol and substance abuse and generally proved unsuccessful in producing long-term behaviour change in adolescents (Leffert, et al., 1998). The emergence of positive youth development therefore signalled a reversal approach, as the focus became one of promotion, rather than prevention, and centred on promoting core elements of human development known to enhance physical health and psychological well-being.

In a recent review of positive youth development, Schulman and Davies (2007) present the many and varied definitions, concepts and ideas that have emerged from this field over the last two decades, and explore how these predominantly American ideas can be operationalised within a British context. They define positive youth development as “the acquisition of all the knowledge, skills, competencies and experiences required to successfully transition from adolescence to adulthood” (p.4) and operationalise it as a multi-dimensional construct comprised of the why, what, where and how of youth development, presenting the key findings of their extensive literature review. These can be seen in Figure 2.1.

<b>WHY – The Philosophical Outlook/Theoretical Basis</b>		
<ul style="list-style-type: none"> <li>• Adolescence is a time of significant dynamic and interrelated biological and psychological changes which must be understood holistically</li> <li>• Young people are active agents in their development</li> <li>• Problem-free young people are not fully prepared young people</li> <li>• Youth 'at promise, not at risk'</li> <li>• Progressive universalism</li> </ul>		
<b>WHAT</b>		<b>WHERE</b>
<b>Constructs of positive youth development addressed</b>		<b>Socialisation domains</b>
<ul style="list-style-type: none"> <li>• Promotes bonding</li> <li>• Fosters resilience</li> <li>• Promotes social competence</li> <li>• Promotes emotional competence</li> <li>• Promotes cognitive competence</li> <li>• Promotes behavioural competence</li> <li>• Promotes moral competence</li> <li>• Fosters self-determination</li> </ul>	<ul style="list-style-type: none"> <li>• Fosters self-efficacy</li> <li>• Fosters clear and positive identity</li> <li>• Fosters a belief in the future</li> <li>• Provides recognition for positive behaviours</li> <li>• Provides opportunities for pro-social involvement</li> <li>• Fosters pro-social norms</li> </ul>	<ul style="list-style-type: none"> <li>• Family</li> <li>• Peers</li> <li>• School</li> <li>• Work</li> <li>• Neighbourhood/community</li> </ul>
<b>HOW – Hallmarks of the programme approach</b>		
<ul style="list-style-type: none"> <li>• Developmentally appropriate structure</li> <li>• Safe settings</li> <li>• Participatory process</li> </ul>	<ul style="list-style-type: none"> <li>• Relationship building</li> <li>• Long-term duration</li> </ul>	

**Figure 2.1. The multidimensional construct of positive youth development (Schulman & Davies, 2007)**

**Models and frameworks of positive youth development.** Within the ‘what’ component, Schulman and Davies (2007) adopt Catalano, Berglund, Ryan, Lonczak and Hawkins’ (2004) constructs of positive youth development, stating that they feel that these are most acquiescent to study. Nevertheless, much discourse remains as to what developmental outcomes are required, and indeed, many different models and frameworks of positive youth development have been proposed over the last 20 years.

*Developmental assets.* One of the primary frameworks forwarded is the developmental assets framework, developed via extensive research by Benson and colleagues at the Search Institute, Minneapolis, during the 1990s. Originally 30 assets, which they later expanded to 40, these developmental assets are intended to reflect core developmental processes that form the ‘building blocks’ of development that, when present or promoted, appear to enhance significant developmental outcomes among youth (Benson, Leffert, Scales, & Blyth, 1998; Leffert et al., 1998). This framework contextualises these assets into 20 external and 20 internal assets. These are thought to reflect core developmental processes that young people should be given the opportunity to experience and develop through interaction with others. External assets include 1) social support, 2) empowerment, 3) boundaries and expectations, and 4) constructive use of time and can be reinforced and developed by the community within which that young person resides. Internal assets are also grouped into four main categories, namely, 1) commitment to learning, 2) positive values, 3) social competencies and 4) positive identity (Benson et al., 1998; Leffert et al., 1998). While external assets are provided by the community surrounding the young person and refer to positive developmental experiences that others provide, internal assets are gradually developed over time through internal processes of self-regulation. The full framework can be seen in Table 2.1.

The Profiles of Student Life: Attitudes and Behaviours (Search Institute, 1996) is a specialised 156-item survey that measures each of the 40 developmental assets, along with certain other constructs including developmental deficits, thriving indicators and high-risk behaviours. It has been widely administered across the U.S. to hundreds of thousands of children aged 11 to 18 years. Results from these surveys consistently demonstrate the cumulative effects of developmental assets. The greater the number of developmental assets a young person displays, the less likelihood there is of participation in high risk behaviours or becoming depressed, violent or otherwise antisocial (Benson et al., 1998). In addition to this protective element, developmental

**Table 2.1. 40 Developmental Assets (Benson et al., 1998)**

<b>Asset Type</b>	<b>Asset and Description</b>
<b>External</b>	
Support	<ol style="list-style-type: none"> <li>1. Family Support: Family life provides high levels of love and support</li> <li>2. Positive family communication: Young person and her or his parent(s) communicate positively and young person is willing to seek parent(s) advice and counsel</li> <li>3. Other adult relationships: Young person receives support from three or more non-parent adults.</li> <li>4. Caring neighbourhood: Young person experiences caring neighbours</li> <li>5. Caring school climate: School provides a caring, encouraging environment</li> <li>6. Parent involvement in schooling: Parent(s) are actively involved in helping young person succeed in school</li> </ol>
Empowerment	<ol style="list-style-type: none"> <li>7. Community values youth: Young person perceives that community adults value youth</li> <li>8. Youth as resources: Young people are given useful roles in the community</li> <li>9. Service to others: Young person serves in the community 1hr or more per week</li> <li>10. Safety: Young person feels safe in home, school and the neighbourhood</li> </ol>
Boundaries and Expectations	<ol style="list-style-type: none"> <li>11. Family boundaries: Family has clear rules and consequences and monitor's the young person's whereabouts</li> <li>12. School boundaries: School provides clear rules and consequences</li> <li>13. Neighbourhood boundaries: Neighbours take responsibility for monitoring young people's behaviour</li> <li>14. Adult role models: Parent(s) and other adults model positive, responsible behaviour</li> <li>15. Positive peer influence: Young person's best friends model positive responsible behaviour</li> <li>16. High expectations: Both parents and teachers encourage the young person to do well</li> </ol>
Constructive Use of Time	<ol style="list-style-type: none"> <li>17. Creative activities: Young person spends 3 or more hrs per week in lessons or practice in music, theatre or other arts</li> <li>18. Youth programmes: Young person spends 3 or more hrs per week in sports, clubs or organisations at school and/or in community organisations</li> <li>19. Religious community: Young person spends 1 or more hr per week in activities in a religious institution</li> <li>20. Time at home: Young person is out with friends "with nothing special to do" 2 or fewer nights per week</li> </ol>



**Table 2.1. 40 Developmental Assets (Benson et al., 1998) (continued)**

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<b>Internal</b>	
Commitment to Learning	21. Achievement motivation: Young person is motivated to do well in school 22. School engagement: Young person is actively engaged in learning 23. Homework: Young person reports 1 or more hr of homework every school day 24. Bonding to school: Young person cares about his or her school 25. Reading for pleasure: Young person reads for pleasure 3 or more hrs per week
Positive Values	26. Caring: Young person places high value on helping other people 27. Equality and social justice: Young person places high value on promoting equality and reducing hunger and poverty 28. Integrity: Young person acts on convictions and stands up for her or his beliefs 29. Honesty: Young person tells the truth even when it is not easy 30. Responsibility: Young person accepts and takes responsibility 31. Restraint: Young person believes it is important not to be sexually active or to use alcohol or other drugs
Social Competencies	32. Planning and decision making: Young person knows how to plan ahead and make choices 33. Interpersonal competence: Young person has empathy, sensitivity and friendship skills 34. Cultural competence: Young person has knowledge of and comfort with people of different cultural-racial-ethnic backgrounds 35. Resistance skills: Young person can resist negative peer pressure and dangerous situations 36. Peaceful conflict resolution: Young person seeks to resolve conflict non-violently
Positive Identity	37. Personal power: Young person feels he or she has control over “things that happen to me” 38. Self-esteem: Young person reports having high self-esteem 39. Sense of purpose: Young person reports “my life has a purpose” 40. Positive view of personal future: Young person is optimistic about her or his personal future

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assets play an enhancement role and encourage the concept of thriving within young people, displayed by outcomes such as being successful at school, displaying leadership and taking time to help others (Scales, Benson, Leffert, & Blyth, 2000). Finally, the higher the level of developmental assets a young person displays, the more resilient they appear to be in difficult situations (Leffert et al., 1998). However, research to-date has clarified that no single programme or activity can promote the development of all of these assets, and so it seems prudent to encourage the pursuit of a variety of interests and experiences (Benson et al., 1998; Leffert et al., 1998; Scales et al., 2000).

More recently, the Search Institute released the shorter Developmental Assets Profile (DAP; Search Institute, 2004), a 58-item measure for youth aged 11-18 years and designed to measure the strength of an individual's developmental assets, both internal and external, within the five social contexts of personal, social, family, school and community. Research utilising this measure has reported acceptable to good internal reliability and construct validity (e.g., Scales, 2011), suggesting this measure is able to accurately capture the development of these assets.

***Lerner's 5Cs model.*** Lerner, Fisher and Weinberg (2000) summarised Benson and colleagues' framework in their own "model of national youth policy" that produced five key developmental outcomes for young people. They labelled these as the Five Cs of Positive Youth Development. The model views development within a systems approach in which public policies impact upon behaviours at a community level. As such, policies and the programmes that are borne out of them need to be developed effectively, with certain essential functions that they must fulfil in order to provide appropriate resources for the healthy development of young people. If such policies and resources are in place, Lerner et al. (2000) proposed that children would have Competence, Confidence, Connection, Character and Caring/Compassion, with the emergence of a sixth C of Contribution when all 5 other Cs are present in a young person. Contribution completes the cycle of development as this is the point at which the young person begins to 'give back' to society and contribute to the positive development of the younger generation (Lerner et al., 2000; Lerner, Almerigi, Theokas, & Lerner, 2005a; Lerner, Dowling, & Anderson, 2003).

Extensive research validating the 5Cs and their association with contribution, deviant behaviours and participation in youth development programmes has been conducted (Alberts et al., 2006; Lerner et al., 2005b). Supported by funding from the US-based National 4-H Council, Richard Lerner and colleagues at the Institute for

Applied Research in Youth Development, Massachusetts, initiated the 4-H study of positive youth development (i.e., qualities associated with Hands, Head, Health and Heart). This longitudinal sequential study was designed to examine existing youth programmes and to assess the developmental assets which existed within them. Over the four-year period between 2002 and 2006, data were collected from 4,404 adolescents using an extensive questionnaire (details of which can be found in Lerner et al., 2005). Initial results confirmed the presence of the 5Cs while those from later stages of the study confirmed the presence of contribution in youth that possessed high 5C levels. Similarly to the Search Institute's work, the presence of positive youth development, measured by that of the 5Cs, was significantly negatively related to depressive symptoms and deviant behaviours. An additional finding within this particular study illustrated that as children grow older the positive influence of positive youth development becomes stronger.

***Youth Development Research Project.*** Around the same time as the 4-H Study was being conducted, Larson and colleagues at the Youth Development Research Project, Illinois, developed the Youth Experiences Survey (YES; Hansen & Larson 2002). Developed via focus groups, an extensive literature review and expert validation, the survey was designed to capture adolescent experiences in extracurricular activities and community-based programmes from a developmental perspective. Later revised to the YES 2.0 (Hansen & Larson, 2005), the survey measures development within six domains of learning experiences divided into personal and interpersonal, similar to Benson's internal and external assets. The three personal domains are 1) identity experiences, 2) initiative experiences, and 3) basic emotional, cognitive and physical skill experiences, while the three interpersonal domains include 1) positive relationships, 2) teamwork and social skills, and 3) adult networks and social capital. The scale also assesses five domains of negative experiences related to participation in the activity.

Findings from the research that has thus utilised this scale support those of the Search Institute's (Benson et al., 1998; Leffert et al., 1998; Scales et al., 2000), whereby participation in a variety of youth activities should be promoted to offer different learning experiences. Hansen, Larson and Dworkin (2003) noted that faith-based and community service style activities, along with community organisations and vocational clubs, such as the YMCA/YWCA and the Scouts, are frequent contexts for experiences related to identity, pro-social norms and links to adults. Sports, meanwhile, were

frequently associated to those experiences related to identity work and emotional development. In a follow-up study involving a larger sample and more in-depth analysis, results revealed that sport stood out as a setting for high rates of initiative experiences including goal setting, effort and time management, along with experiences related to emotional regulation (Larson, Hansen, & Moneta, 2006). However, Hansen and Larson (2002) caution against using results from the YES to imply causal links between these experiences and the development of these skills. The YES was developed simply to gain an understanding of youth experiences and was not intended to be used longitudinally to test causal models of change. Further caution is advised when looking to examine specialised learning experiences within specific activities such as sport as Hansen and Larson suggest that these are not well covered by the YES.

*Collaborative for Academic, Social and Emotional Learning (CASEL).* A final initiative engaging in positive youth development is represented by the collaborative research group referred to as CASEL. This group tasks themselves with integrating what they call social and emotional learning into educational settings from preschool through to high school. They aim to develop five core competencies in students that they believe will positively contribute to their development, namely: self-awareness, self-management, social awareness, relationship skills and responsible decision-making (Weissberg & O'Brien, 2004). In a review of social and emotional learning, Weissberg and O'Brien discuss three programmes that have previously been successfully integrated within primary schools, focusing on pupils from Kindergarten to Grade 6 (typically 11-12 years of age). The first, the Caring School Community (CSC), focuses on strengthening connections among peers, between teachers and students and between home and school. A variety of strategies have been used to achieve these objectives including in-class discussions, buddy programmes, family involvement activities and community involvement activities. A second programme, Promoting Alternative Thinking Strategies (PATHS), involves a more focused approach to developing peer relationships, emotional awareness and self-control. A programme of between 30 and 45 lessons are delivered throughout the school year during which pupils discuss their feelings, practice ways to calm themselves through breathing techniques and develop empathy by using an 11-step model to problem solving. The third programme, Skills, Opportunities, and Recognition (SOAR) focuses more on school-wide initiatives that increase family involvement and provide more consistent opportunities for children to practice emotional regulation, respect for others,

cooperation, problem-solving and relationship building. Evaluations of these programmes report lower incidences of deviant behaviours such as drug and alcohol use, reduced aggressive and hyperactive behaviours and higher reports of pro-social and problem-solving behaviours (e.g., Greenberg & Kusche, 1998; Hawkins, Catalano, Kosterman, Abbott, & Hill, 1999; Solomon, Battistich, Watson, Schaps, & Lewis, 2000). Weissberg and O'Brien noted that the challenge lies in progressing the programmes which have been successful in the junior school environment into a high school context, and they stress the importance of an integrated programme that is planned, monitored and refined over time to ensure long-term success of such programmes.

### **The First Wave of Positive Youth Development through Sport: Life Skills Approaches**

While a positive youth development approach was not consciously transferred to sport until 2005, a body of work that closely maps to positive youth development is the area of life skills, which has been pursued since the early 1980s. The research in this area followed two distinct strands. The first strand reflected the development and evaluation of bespoke programmes designed to use sport as a vehicle through which to provide young people with the opportunities to develop specific characteristics. The second strand focused on developing an understanding of existing sport programmes, such as those found in high schools, and evaluating the methods and outcomes of these. Whilst life skill development is only one focus of a positive youth development approach, it is important to review the significant research in this area.

**Bespoke programmes for the development of life skills.** Life skills are generally accepted to be psychological, social, emotional and behavioural skills that individuals can develop via engagement in appropriate environments and through a range of different experiences. Life skills provide individuals with abilities for adaptive and positive behaviour and are considered to be transferable across domains. As with positive youth development, life skill development requires a focused approach as these skills need to be “taught and not caught” (Hodge, 1989) through demonstration, modelling and practice in the same way as it is necessary to teach physical skills. As argued by Gould and Carson (2008), sport represents a favourable context for the development of life skills as it is an environment in which children and young people are already engaged and focused on skill development. As a result of the requirement

for a focused approach towards life skill development, a number of sports-based life skills programmes have been developed and implemented over the years.

***Going for the Goal.*** Launched in 1987, the Going for the Goal (GOAL) programme was a 10-hour, 10-session programme, primarily focused on goal setting and taught by secondary school students, the aim of which was to use sport as a vehicle through which to teach life skills (such as personal control and confidence) to younger students (Danish & Nellen, 1997). An award-winning programme, well supported by government grants, GOAL was disseminated across much of North America and almost 20,000 students had received the programme by the end of 1996, before it was initiated in New Zealand in 1997. However, the programme struggled to successfully integrate sport skills with life skills and transferability of skills to other domains was questioned. Nevertheless, it did provide the basis for the development of the Sports United to Promote Education and Recreation (Danish & Nellen, 1997) programme.

***Sports United to Promote Education and Recreation (SUPER).*** The SUPER programme continued with the goal setting theme established in the GOAL programme and built on these foundations in an attempt to develop other life skills. Once again, older peers were used to deliver the programme to younger adolescents through a series of 18, 20-30 minute modules (see Table 2.2 for more information). However, it appears that difficulties persisted in transferring the skills learned in the sporting domain to other life domains (Danish & Nellen, 1997), although the addition of a community service element to the programme was found to enhance levels of empathy and social responsibility (Brunelle, Danish, & Forneris, 2007). The SUPER programme has since been used in New Zealand to develop both the Rugby Advantage Programme (RAP; Hodge, Heke, & McCarroll, 2000) and the Hokowhitu Programme, a life skills programme developed specifically for the indigenous population of New Zealand. It has also been successfully implemented in Greece (Papacharisis, Goudas, Danish, & Theodorakis, 2004) and has been applied to golf to develop the First Tee programme (Theokas, Danish, Hodge, Heke, & Forneris, 2008).

***The First Tee.*** An initiative of the World Golf Foundation, the First Tee was first established in 1997 with a mission to “impact the lives of young people by providing learning facilities and educational programmes that promote character-development and life-enhancing values through the game of golf” (Weiss, 2006). With the support of the World Golf Foundation, the First Tee has been globally disseminated so that there are now programmes in Canada, Ireland, Singapore and New Zealand. In

**Table 2.2. Summary of SUPER Programme (Theokas et al., 2008)**

<b>Workshop</b>	<b>Programme Content</b>
<b>1</b>	<b>Developing a Team</b> The programme and the peer leaders are introduced. Participants engage in several team-building activities designed to enhance communication and understand each other's strengths and weaknesses.
<b>2</b>	<b>Dare to Dream</b> Participants learn about and discuss the importance of having dreams for the future. They then identify career/school and sport dreams they have for 10 years in the future. The peer leaders share some of their dreams.
<b>3</b>	<b>Setting Goals (Part 1)</b> Participants learn the difference between dreams and goals and how to turn a dream into a goal. They identify people who support them in achieving their goals (Goal Keepers) and people who may prevent them from achieving their goals (Goal Busters).
<b>4</b>	<b>Setting Goals (Part 2)</b> Participants learn the four characteristics of a reachable goal (positively stated, specific, important to the goal setter and under the goal setter's control). They practice distinguishing goals that are important to the goal setter and goals that are positively stated.
<b>5</b>	<b>Setting Goals (Part 3)</b> Participants practice distinguishing goals that are specific from ones that are not specific and goals that are under their control from those that are not.
<b>6</b>	<b>Making Your Goal Reachable</b> Participants apply the four characteristics of one reachable goal to their own goals. They set two six-week goals; one for sport and a personal goal.
<b>7</b>	<b>Making a Goal Ladder</b> Participants learn the importance of developing plans to reach goals (called a Goal Ladder) and make plans to reach the two goals they have set. Making a ladder involves placing the goal at the top of the ladder and identifying six steps to reach their goal.
<b>8</b>	<b>Identifying and Overcoming Roadblocks to Reaching Goals</b> Participants learn how different roadblocks (e.g. using drugs, getting into fights, lack of confidence) can prevent them from reaching their goals. They identify possible roadblocks and learn and practice a problem solving strategy called STAR (Stop and take a deep breath, Think of all your choices, Anticipate the consequences of each choice and Respond with the best choice) to help them overcome the roadblocks.
<b>9</b>	<b>Seeking Help From Others</b> Participants learn the important of seeking social support when working on goals. They identify people in their lives, a Dream Team, who can provide doing and/or caring help to assist them in achieving their goals.

**Table 2.2. Summary of SUPER Programme (Theokas et al., 2008) (continued)**

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<b>10</b>	<b>Using Positive Self-Talk</b> Participants learn the importance of identifying their self-talk, how to distinguish positive from negative self-talk and how to identify key positive self-talk statements related to their goals. They then practice making positive self-talk statements.
<b>11</b>	<b>Learning to Relax</b> Participants learn the importance of relaxation to reduce tension and how to focus and breathe as a means to help them relax.
<b>12</b>	<b>Managing Emotions</b> Participants learn that managing their emotions, both in sport and life, is learning to be smart. They learn and practice a procedure, the 4R's (Replay, Relax, Redo, Ready), to help them play smart both inside and outside sport.
<b>13</b>	<b>Developing a Healthy Lifestyle</b> Participants develop and understanding of the importance of being healthy in all areas of their lives. They also learn how to make changes to insure they are living a healthy lifestyle and are asked to make a commitment to such a lifestyle.
<b>14</b>	<b>Appreciating Differences</b> Participants identify differences among individuals in the group and determine which ones are important and which ones are insignificant in reaching goals.
<b>15</b>	<b>Having Confidence and Courage</b> Participants understand the importance of believing in themselves and learn how to develop more self-confidence.
<b>16</b>	<b>Learning to Focus on Your Personal Performance</b> Participants learn what it means to compete against oneself and understand that competing against oneself to attain personal excellence can enhance performance.
<b>17</b>	<b>Identifying and Building on Your Strengths</b> Participants identify personal strengths and learn how to use the skills associated with these strengths and the skills learned in the programme in other areas of their lives.
<b>18</b>	<b>Goal Setting for Life</b> Participants learn that goal setting is a lifetime activity and they set two goals to attain over the next three months. One goal is school related; the other relates to home or community. They assess whether the goals meet the four characteristics of a reachable goal and develop a goal ladder for each goal.

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recent years, the First Tee has been referred to more as a model of positive youth development than simply a life skills programme, with the environmental factors (context) taken into consideration in addition to both internal (life skills) and external (coach strategies) assets. The careful manipulation and combination of each of these three factors then results in the development of the “First Tee Nine Core Values” of honesty, integrity, respect, responsibility, courtesy, sportsmanship, confidence,



judgement and perseverance. Research looking at the effectiveness of this programme reports both a high degree of transferability of life skills to other domains and a high degree of retention of these skills over a three-year period (Weiss, 2008).

Meanwhile, another predominant life skills-oriented model with close links to positive youth development was developing alongside the work of Danish and colleagues, which was Hellison's (2003) Teaching Personal and Social Responsibility Model.

***Teaching Personal and Social Responsibility Model.*** Hellison's work began in 1970 when he was a physical education teacher for inner city youth. By 1997, Hellison and Cutforth had constructed 11 key criteria for what they called 'state-of-the-art' youth development programmes designed for use in inner city areas. Their criteria shows striking similarity to those presented in the National Research Council and Institute of Medicine's (NRCIM; 2004) report on community programmes with some additional elements such as small programme numbers and a holistically individual approach that encourages strong leadership and a vision for the future (Fraser-Thomas et al., 2005).

Designed to increase the amount of responsibility young people take for their personal, social and moral development, the Teaching Personal and Social Responsibility Model in its current form uses the concepts of self-motivation and goal-setting to gradually empower youth and encourage more personal responsibility, while focusing on respecting and helping others to promote social and moral responsibility. The model is designed around five levels of responsibility that are implemented through the development of strong relationships between instructor and participant within physical education classes before transferring the application of these skills to home and community settings. Table 2.3 presents a summary of this model.

The focus on social and personal development was adopted by the National Football Foundation (NFF) in the development of their own life skills programme – Play It Smart (Petitpas et al., 2004).

***Play It Smart.*** Originating from a need to be more inclusive and to target those from disadvantaged communities, Play It Smart used individual and team goal setting principles to emphasise continual growth and enhancement of skills while team building and group activities were used to generate pride in team membership. Parents and other family members were integrated into the programme to ensure reinforcement of programme values and goals in the home environment, and individualised incentive plans were created that were linked to the achievement of targeted goals. The

**Table 2.3. Summary of Teaching Personal and Social Responsibility Model (Hellison, 2003)**

<b>Level</b>	<b>Components</b>	<b>Characteristics</b>
<b>0</b>		<b>Irresponsibility</b> Students who operate at Level Zero make excuses, blame others for their behaviour and deny personal responsibility for what they do or fail to do.
<b>1</b>	<b>Respecting the rights and feelings of others</b> Self-control The right to peaceful conflict resolution The right to be included	<b>Respect</b> Students at Level 1 may not participate in daily activities or show much mastery or improvement, but they are able to control their behaviour enough that they don't interfere with the other students' right to learn or the teacher's right to teach. They do this without much prompting by the teacher and without constant supervision.
<b>2</b>	<b>Participation and effort</b> Self-motivation Exploration of effort and new tasks Courage to persist when the going gets tough	<b>Participation</b> Students at Level 2 not only show at least minimal respect for others but also willingly play, accept challenges, practice motor skills and train for fitness under the teacher's supervision
<b>3</b>	<b>Self-direction</b> On-task independence Goal-setting progression Courage to resist peer pressure	<b>Self-direction</b> Students at Level 3 not only show respect and participation but also are able to work without direct supervision. They can identify their own needs and begin to plan and carry out their physical education programs.
<b>4</b>	<b>Helping others and leadership</b> Caring and compassion Sensitivity and responsiveness Inner strength	<b>Caring</b> Students at level 4, in addition to respecting others, participating and being self-directed, are motivated to extend their sense of responsibility beyond themselves by cooperating, giving support, showing concern and helping.
<b>5</b>	<b>Outside the gym</b> Trying these ideas in other areas of life Being a role model	

programme was piloted over a two-year period and evaluation results were deemed so successful that the scheme was rolled out to 88 sites across the United States (Petitpas et al., 2004). More recently, an evaluation of 1,361 graduates of the Play It Smart programme found that the positive mentoring relationship that the participants had developed with their coaches enabled them to remain positive and preserve through

challenges that they faced in life after high school (VanGorden, Cornelius, & Petitpas, 2010).

While evaluation studies into the effectiveness of these life skill programmes have taken place and produced promising results, more longitudinal evaluations that employ stronger measures of life skills and their transferability are needed (Gould & Carson, 2008).

**Existing programmes and the development of life skills.** The second strand of life skills research investigated life skill development within existing programmes and has taken one of two approaches. That is, researchers have considered *either* the needs of athletes *or* the factors that contribute to the development of life skills.

Gould, Chung, Smith and White (2006) surveyed 154 high school coaches from a variety of sports and found that they rated psychosocial development and the teaching of physical skills as the most important aspects to teach their athletes. Further exploration revealed that coaches felt that athletes needed to develop greater levels of personal responsibility and motivation/work ethic in addition to improving their ability to listen to and communicate with others and to develop strategies to deal more effectively with parents. Gould, Carson, Fifer, Lauer and Benham (2009) found similar needs identified through interviews with coaches, athletic directors and school principals, identifying issues such as learning to deal with pressure and expectations to win, in addition to handling parental over-involvement more effectively. In one of the few studies conducted outside of a North American context, Jones and Lavallee (2009a) conducted focus groups with 19 adolescent athletes, 10 coaches and nine sport psychology professionals from a range of sports to ascertain the most important life skills for youth sport participants. Results revealed two broad categories of personal (e.g., self-organisation, discipline, self-reliance, goal-setting, managing performance outcomes and motivation) and interpersonal (e.g., social skills, respect, leadership, family interactions and communication) skills as important, with social skills cited as the most important to develop.

More recently, studies have focused on *how* life skills are developed through sport, and research in this area has primarily investigated coach interactions with participants. Gould et al. (2007) conducted telephone interviews with 10 highly experienced high school football coaches to ascertain how they developed life skills in their players. Coaches were selected based on their success at developing life skills and had received awards recognising them for their efforts. Results revealed that the

development of positive relationships through good communication, in addition to respecting athletes as young adults, were key factors for developing both performance and life skills. Coaches were also aware of the effect of providing a good role model through their own behaviours and being consistent in their coaching behaviours. Coaches therefore used both direct and indirect strategies to develop life skills and embraced a philosophy that placed prime importance on the development of life skills.

Meanwhile, Holt et al. (2008) observed and then interviewed twelve student-athletes and their head coach from a high school soccer team. They identified the presence of three key life skills, namely initiative, respect and teamwork/leadership. However, they failed to observe much direct teaching of these life skills, instead finding that the players were “producers of their own experiences” (p.281). It was suggested that the sporting experience enabled the students to demonstrate their possession of these life skills but there was no clear evidence that these skills had actually been developed within the sporting environment. Support for this suggestion was provided by Holt, Tamminen, Tink and Black (2009) who interviewed 40 young adults from a variety of sports about their life skill development through sport. Results of this study once again suggested that it was not sport itself that taught the skills rather that sport provided the context for particular social interactions to occur with coaches, parents and peers, which thus allowed individuals to be taught certain life skills.

### **The Second Wave of Positive Youth Development through Sport: From Developmental to Sport Psychology**

The second wave of positive youth development through sport came about when the concepts and theories of positive youth development as laid out in this review were concurrently transferred into the sport domain by Fraser-Thomas et al. (2005) and Petitpas et al. (2005). Fraser-Thomas et al. discussed both the positive and negative consequences of sport participation and concluded that a focused approach to positive development through sport was clearly required. Petitpas et al. also made the argument for a focused approach and proposed a framework that could be used for planning youth sport programmes to promote psychosocial development featuring four “critical areas” (p. 66). These were reported as 1) context, 2) external assets, 3) internal assets and 4) research and evaluation. Two fundamental differences between previous research in the area of life skills and the research that is situated within more of a positive youth development context exist. The first of these differences relates to the actual attributes of psychosocial development. Both authors refer to the development of developmental

or internal ‘assets’. Whilst these, on the surface, may appear to be the same as life skills, subtle differences between the two do exist. For example, Danish and colleagues defined life skills as “behavioural (communicating effectively with peers and adults) or cognitive (making effective decisions); interpersonal (being assertive) or intrapersonal (setting goals)” (Danish, Taylor, Hodge, & Heke, 2004), and they stressed the need for these factors to be both *skills* in the truest sense of the word, and also transferable. With this definition in mind, it is clear that, whilst many of the internal assets that are the focus of positive youth development programmes can be defined as life skills, there are also additional psychosocial attributes that form the focus of development with a positive youth development approach. These include the formation of a clear and positive identity and the development of a sense of social and emotional connection to others which, in turn, foster a sense of belonging and assist with developing meaningful relationships with others, all of which are assets in their own right.

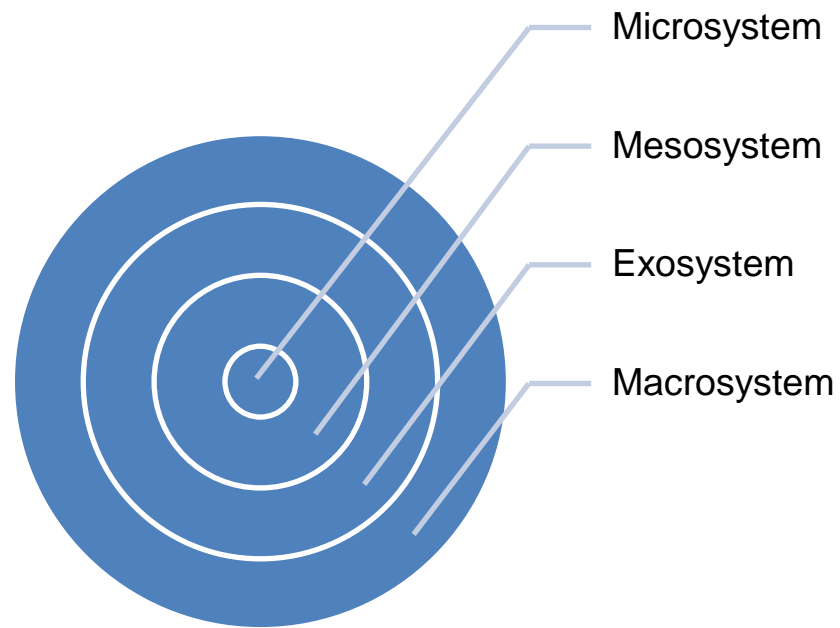
The second fundamental difference is in regards to the ‘holistic’ approach, in which the development of internal assets are considered to result as a product of the interaction between the environment (context) and the significant others that operate within that environment. This interaction between person and environment provides the external assets of development. These external assets are resources that individuals can use to assist with their development, and include positive relationships with adults and the opportunities that these relationships provide for development. As Benson and colleagues (1998) note, “these positive development experiences...emerge through constant exposure to informal interactions with caring and principled adults and peers, and they are reinforced by a larger network of community institutions” (p.143). External assets therefore exist within and ultimately form a nested ecology of systems within which development occurs. This understanding forms the basis of systems theory, which was the approach utilised by Lerner in his model of youth policy at the point when he first postulated the idea of his 5C theory.

**Systems theory: The Bioecological model.** Ecological systems theory forms the conceptual basis of positive youth development and is best explained in the context of the Bioecological Model (Bronfenbrenner & Morris, 1998). Within this model, development is viewed as a function of interactions between individuals and their environments, referred to as social ‘ecologies’. An individual’s predispositions and innate physical qualities combine with cognitive attributes, referred to within positive youth development as internal assets, to determine the characteristics that will, in turn,

determine an individual's level of engagement within a given environment and influence the opportunities for further development. This is true for both the developing individual and for the significant others within the environment. Therefore, dispositional characteristics that the significant other has may influence the interactions between the developing individual and the significant other. We have seen this relationship in sport, whereby interactions between parents and children represent an example of this ecological approach. For example, both Ames (1992) and Duda and Hom (1993) conducted research in the areas of motivational climate and achievement goal orientations, and the authors found that children's perceptions of their parents' goal orientations were linked to the respective child's own goal orientations. Eccles et al.'s (1983) expectancy-value model of achievement also lends support to this proposition with research by Fredricks and Eccles (2004) demonstrating that parents influence their children's motivation via their own belief systems and through their own behaviours, thereby acting as role models, interpreters and providers of children's experiences. Finally, other research has also suggested that children's psychosocial responses in physical activity and sport settings are heavily influenced by their parent's beliefs and behaviours (Babkes & Weiss, 1999; Brustad, 1993; Woolger & Power, 2000). These findings corroborate the importance of *modelling* in young people's development, a salient theme that is identified within much of positive youth development research (e.g., Côté, 1999; Fraser-Thomas et al., 2005).

The environment is referred to as the *ecological environment* (Bronfenbrenner, 1977, 1979) and is comprised of a series of systems, each set inside the next (see Figure 2.2). At the innermost level lies the *microsystem*, which refers to single, immediate settings that contain the developing person and include such contexts as the family, school or sporting team or club. From a positive youth development perspective, the context at the microsystem level needs to be specifically structured towards encouraging positive development. For this purpose, the NRCIM (2004) proposed eight features of positive developmental settings: (a) physical and psychological safety, (b) appropriate structure, (c) supportive relationships, (d) opportunities to belong, (e) positive social norms, (f) support for efficacy and mattering, (g) opportunities for skill building and (h) integration of family, school and community efforts.

The ecological systems grow and develop out of this microsystem in such a way that two or more microsystems are considered a *mesosystem*, and experiences that occur within one of these microsystems will also affect ongoing behaviour and activities



**Figure 2.2. Bronfenbrenner's ecological environment**

within the other microsystems. For example, an athlete who is under pressure at school due to exams may exhibit a high degree of stress within the family and/or a low training quality within the sporting environment. A further layer of complexity is then added by the consideration of the effect of environments that the individual does not participate in, but that does affect the behaviour of the individual in their own microsystems. This ecology is referred to as the *exosystem* and a good example is the parents' workplace. For example, a mother or father may be running late at work due to a meeting, a heavy workload or simply heavy traffic on the way home. This may then result in the young individual not being on time for a training session, something which can have negative consequences in some circumstances, such as missing out on the warm-up, having to do extra training as a means of punishment or perhaps even exclusion from the session altogether. Finally, the wider social, cultural and political context that all of these environments operate within is known as a *macrosystem* and this will affect the interactions between individuals within these smaller environments, along with the outcome measures that are used to ascertain if these environments are operating effectively. For example, governments dictate the who, when, where, and how frequently of examinations within the school environment, which then impacts on what a young person is taught within a particular period of time and at a particular age. In the same way, national governing bodies of sport, through, for example, their coach

education programmes, can influence the coach objectives within a training environment.

Interactions that occur within microsystems are considered as ‘proximal’ and these become increasing ‘distal’ as we move outward through mesosystem, exosystem and macrosystem (Bronfenbrenner & Morris, 1998). Research within positive youth development attempts to account for both proximal and distal influences, yet, to date, the majority of research in positive youth development through sport has considered primarily proximal interactions.

**Research in positive youth development through sport.** Interest in the area of positive youth development through sport has increased rapidly over the last ten years. As noted previously, Fraser-Thomas et al. (2005) and Petitpas et al. (2005) both proposed ways in which youth sport programmes could and should be used to foster positive youth development. Since the introduction of these conceptual models within the sport literature, many studies have attempted to address the more holistic positive youth development approach whilst addressing more specific questions related to psychosocial/life skill development.

***Coach perspectives on positive youth development through sport.*** One of the most common approaches within this new body of literature is to replicate that from the life skills approach, in which researchers ask *how* coaches facilitate positive youth development within sport and attempt to develop a greater understanding of specific strategies used to develop a range of internal assets. With this aim, Lacroix et al. (2008) interviewed 16 high school coaches and found that, while coaches could generally present an ideal representation of what school sports should be, they were often unable to provide concrete examples of activities and methods that they employ to foster youth development. This supports research of McCallister et al. (2000) who found inconsistencies between youth sport coaches’ stated philosophies and the actual implementation of their respective philosophies. Further, Lacroix et al. found that many coaches were actually parents and senior student-athletes who had been recruited due to a shortage of trained coaches, raising questions as to the quality of the coaching process within these contexts. However, Vella, Oades and Crowe (2011) in their Australian study of 22 coaches of adolescent athletes found that coaches saw themselves as responsible for facilitating eight areas of internal assets; namely, competence, confidence, connection, character, life skills, climate, positive affect and positive psychological capacities. The researchers did, however, note that whilst coaches noted



these as important outcome measures, the respondents may have given socially desirable answers and so an assessment of the actual coach behaviours is necessary in order to develop these assets. Camiré, Forneris, Trudel and Bernard (2011) published a review paper of their most recent studies in order to summarise some of the strategies that youth sport coaches used to facilitate positive youth development through sport. Strategies included 1) developing a well-considered coaching philosophy and presenting it to parents and athletes to ensure everyone knew the approach that the coach was going to take that year; 2) developing meaningful relationships with their athletes via social events, regular individual meetings and athlete sport journals; 3) intentional planning of developmental strategies into coaching activities; 4) providing opportunities to practice life skills in sport; and 5) talking to athletes about the transferability of life skills and teaching them how to transfer the skill into different domains through the use of structured guidance and examples.

In the only positive youth development study to investigate the potential of an elite sport setting for positive youth development, Strachan et al. (2011) interviewed five elite sport coaches and concluded that three key elements were necessary for positive youth development to occur within elite sport. The first was the presence of an appropriate training environment, defined as a context in which athletes were safely engaging in high levels of deliberate practice with low levels of deliberate play and in which basic skills and proper progressions were taught under proper supervision. The second element was the provision of opportunities to develop physical, personal and social skills. Whereas Côté and colleagues have previously adopted the 4Cs framework (a collapsed version of Lerner's 5Cs of competence, confidence, connection, character/caring) as the key coach objectives within a positive youth development approach, this paper acknowledges the relevance of and opportunities to develop additional skills such as personal responsibility, decision making, time management, mental toughness and concentration. Furthermore, social skills may be developed leading to increased confidence, competence and motivation via an increase in the feeling of a sense of belonging. The third key element noted by the authors is the presence of supportive interactions which is most often provided by the coach, but is also provided by peers and parents. It is the presence of these supportive interactions that provide the increased opportunity for development of numerous additional internal assets (Strachan et al., 2011).

***Parental perspectives on positive youth development through sport.*** Strachan et al. (2011) affirmed that coaches are critical agents within positive youth development in sport, and the critical nature of their role is highlighted by the amount of studies that investigate the role and influence of the coach within positive youth development. However, parents are also critical to the success of elite sport programmes - through both the support they give to the programme itself and via the support they provide to the athlete. However, only one study to-date has taken a parental view to positive youth development in sport. Camiré et al. (2009a) interviewed 20 parents who had at least one child involved in high school sports and asked them to comment upon their own experiences of sport, the types of support they felt that they provided to their children and the qualities that they believed high school coaches should possess. They were also asked to comment on their opinion of the most appropriate environment to promote within high school sport, playing time and how they believed high school sport influenced the development of internal assets. Parents reported providing emotional, financial and logistical support that diminished as their child got older – e.g., when their children became more independent and able to drive themselves, as well as able to access alternative sources of support, such as peers. The majority of parents felt that the emphasis should be on pleasure and enjoyment; however, some did feel that competition was an important element, especially for the older children. Parents also noted the importance of a supportive, motivating and encouraging coach and cited physical social and academic development as benefiting most from school sport participation, with social skill development benefiting the most.

***Athlete perspectives on positive youth development through sport.*** Camiré et al. (2009b) conducted a similar study considering athlete perspectives of the development of internal assets through sport. Twenty athletes from four sports were interviewed about their experiences in high school sport. Specifically, athletes were asked about both coach and parent interactions and their provision of support in addition to how they felt that the sport influenced their development. Results revealed that athletes felt they received satisfactory levels of support and were able to communicate effectively with their coaches; however, some did note that coach age or gender influenced their ability to interact effectively with their coach (e.g., some female athletes found it more difficult to talk to a male coach). Athletes reported developing effective time management skills, confidence, leadership and social skills via participation in high school sports.

In one of the first studies in the field to focus on one specific sport, Fraser-Thomas and Côté (2009) interviewed 22 adolescent swimmers and asked them to discuss how they felt swimming had influenced their development in both positive and negative ways. Athletes reported five key areas of positive experiences including being challenged, developing meaningful adult and peer relationships and experiencing a sense of community. Four negative experiences were also noted including poor relationships with coaches, negative peer influence, the burden of parental pressure and experiencing a negative challenging psychological environment. Clubs were reported to facilitate a sense of community involving coaches, parents and peers, with peer interactions also highlighted as predominantly positive, with any negative experiences short lived. Stress was reported as positive by those who were able to develop coping skills to overcome it, while those who did not think they had the resources to deal with the stress reported it as a negative entity. Those who spoke of emotional mental challenges more negatively, also reported feelings of isolation, reinforcing the importance of the provision of appropriate social support as found in previous research in both this area (e.g., Strachan et al. 2011) and within the social support literature (Holt & Hoar, 2006). Specific recommendations for the delivery of adolescent competitive swim programmes that facilitate positive youth development include an additional emphasis on coach training to increase coach understanding of athlete psychological, social and emotional development. Researchers also noted that coaches need to be cautious not to underestimate their impact on athlete development, and it is feasible to implement a mentor system whereby older, more experienced athletes are assigned a younger athlete to develop and guide through the more challenging situations that competition offers.

Finally, Jones and Lavalley (2009b) conducted a case study wherein they discovered an experiential learning pathway for the development of internal assets through tennis. The participant was 22 years old at the time of the study, and a series of five interviews explored her journey of development and how she believed she had developed life skills. The participant was purposefully selected based on displaying strong life skills, determined through a record of her life experiences to-date, in addition to her scores on the Youth Experiences Survey - 2 (YES-2; Hansen & Larson, 2005). Results of the study suggested that there was an interaction of dispositions and experiential learning which resulted in the successful development of life skills. Specifically, the individual felt that she was born with certain characteristics and

qualities that her experiences in tennis allowed her to demonstrate, develop and use to develop other life skills. However, she didn't feel that she was ever 'taught' the skills, leading the authors to state their belief that it appeared she had in fact 'caught' the skills, a suggestion that goes against much of the research in this area (e.g., Gould & Carson, 2008). Parental support was also noted as important and, in a similar vein as for suggestions made by Bloom (1985), was the notion of parents encouraging value in particular contexts and the skills and assets that they required. The participant also believed that, whilst she learnt her skills through tennis, that she was able to transfer them to other domains, an important consideration as to the classification of an asset as a life skill. Nevertheless, when the participant's experiences are discussed and the issue of dispositions and parental encouragement of particular values are taken into consideration, one must consider how much of a role tennis actually played in the development of these skills, independently from parental influences and experiences encountered outside of the sport.

***Measurement-focused approaches to positive youth development through sport.*** A second line of research has been more quantitative in nature, and has used or examined the application of existing measures of positive youth development within a sport setting. Strachan, Côté and Deakin (2009) used the Developmental Assets Profile (Search Institute, 2004) to measure the development of Benson's 40 assets within 123 male and female athletes. Measures of burnout and enjoyment were also utilised, the results of which were used to determine the most significant assets associated with burnout and enjoyment. Results revealed the internal asset of positive identity and the external assets of empowerment and support as the three most important factors to consider when attempting to enhance enjoyment levels and reduce attrition through lowering burnout rates. Results of the study are discussed in line with Bronfenbrenner's ecological systems theory and, as such, the development of the internal asset of positive identity is proposed to be developed via enhancing the external assets of empowerment and support. The focus of the bioecological model allows development to be viewed very much as a product of both the person and the context within which they operate, and leads Strachan et al. (2009) to conclude that the sporting context is clearly likely to contribute to development. As stated by the researchers themselves, the higher proportion of females to males within the sample is a limitation of the study, as previous research has found female athletes to display more pro-social behaviours (Rutten et al., 2007) and to possess a greater number of developmental assets than males (Search

Institute, 2004). However, the use of the DAP within the sport context did prove to be successful with Cronbach alpha values ranging from 0.68 to 0.89 on all but one subscale. The “constructive use of time” subscale returned a score of 0.34 and was subsequently removed from all further analysis, although a strong rationale for the variability in scores for this subscale was provided.

To explore the link between the perceived actions and behaviours of high school coaches and athletes reports of positive (including the development of life skills) and negative experiences in sport, the Youth Experiences Survey - 2 (YES-2; Hansen & Larson, 2005) was administered to 190 student athletes by Gould and Carson (2010, 2011), in addition to the Coaching Behaviour Scale for Sport (CBS-S; Côté, Yardley, Hay, Sedgwick, & Baker, 1999) and an 8-item study-specific measure of coaching behaviours that was related to facilitating positive life skills development. Whilst the identity exploration, cognitive skills and negative group dynamics subscales returned relatively low internal reliability scores (.55, .47, and .42, respectively), the rationale for continued inclusion of these subscales was sound and the measure appeared to hold up well within this population. Results empirically revealed that the development of internal assets in sport was influenced by the types of behaviours participants perceived coaches to use. Specifically, teaching competitive strategies, mental preparation, goal setting, modelling good sportsmanship, motivating individuals to work hard on their own and emphasising how sports lessons relate to life were all aspects associated with positive developmental experiences.

In a subsequent study, Gould, Flett and Lauer (2012) administered the YES-2 to 239 baseball and softball players in combination with the Sport Motivational Climate Scale (Smith, Cumming, & Smoll, 2008) and the Caring Climate Scale (Newton et al., 2007). Psychometrically, the YES-2 performed satisfactorily with only four out of the 12 subscales returning poor Cronbach alpha coefficients ( $\alpha < .70$ ). Mean inter-item correlations were reported as a secondary measure of internal reliability for these subscales, with a critical value of .20 (Briggs & Cheek, 1986; Pallant, 2007). All four subscales met this secondary marker and were therefore retained. Results supported those of previous studies that emphasised the influence of coach behaviours on positive development. Specifically, the researchers found that the more that coaches create caring, mastery-oriented environments, the greater the presence of positive developmental gains.

However, McDonald, Côté, Eys and Deakin (2012) tested the psychometric properties of the YES-2 (Hansen & Larson, 2005) with 637 athletes aged 9-19 years from 32 different sports. A rigorous evaluation process (in which a total of seven different models were tested) failed to reproduce the factor structure as outlined by Hansen and Larson. Consequently, and due to suggestions by Hansen and Larson (2002) that the measure may be subject to contextual influences, McDonald et al. conducted an exploratory factor analysis to investigate the most appropriate factor structure for use within sport. This resulted in 33 items being removed due to low loadings or high cross loadings and the creation of a 37-item, five-factor measure named the Youth Experience Survey for Sport (YES-S). The factors were labelled 1) personal and social skills; 2) cognitive skills; 3) goal setting; 4) initiative; and 5) negative experiences.

Similarly, Jones et al. (2011) conducted an analysis of the latent factor structure of Lerner's 5Cs in sport using 258 participants aged between 12 and 16 years. The instrument used to do this was a subset of 30 items selected from a study by Phelps et al. (2009), which in itself had used a subset of 78-items from Lerner et al. (2005b) 4-H study of positive youth development. Jones and colleagues rejected the five-factor model that was tested, based on what they interpreted as a poor model fit. However, it appears they did use very strict cut off values to assess the model fit as they reported model fit statistics of  $\chi^2(395) = 1257.07, p < .00001$ ; RMSEA = .094; SRMR = .082; CFI = .93). Nevertheless, they did report high inter-factor correlations ranging from .81 to .94 for five of the 10 inter-factor correlations. After rejecting the five-factor model, Jones et al. conducted an exploratory factor analysis on the data, resulting in the proposition of a two-factor model of pro-social values and competence/confidence. However, the results of this study need to be considered carefully as there are a number of limitations. First, and most important, is regarding the instrument that was used to assess the five-factor model. Only 30 items from the 78-item instrument used in Phelps et al.'s research (2009) which, in itself had already been significantly pared down from an extensive battery of measures containing hundreds of items, were selected for this study. The authors themselves note this as a limitation and acknowledge that the selection of different items may have resulted in a better model fit. Furthermore, the data was collected from sport participants at summer camps. While this research allows us to consider the influence of more bespoke programmes, it is argued that this is not reflective of the lived experiences of many who engage in sport over a season or

extended period of time and who commit to a team, a coach, or a lifestyle. This limitation is also acknowledged by the authors - and this is considered particularly pertinent in the context of this thesis.

Finally, Vierimaa, Erikson, Côté and Gilbert (2012) proposed a series of individual questionnaires that could be used to collectively measure Côté's 4Cs of positive development. An adapted version of the Sport Competence Inventory (Causgrove, Dunn, & Bayduza, 2007) was suggested to measure competence, while the self-confidence subscale of the Revised Competitive State Anxiety Inventory – 2 (CSAI-2R; Cox, Martens, & Russell, 2003) was proposed to measure confidence. The Coach Athlete Relationship Questionnaire (CART-Q; Jowett & Ntoumanis, 2004) and an adapted version of the Peer Connection Inventory (Coie & Dodge, 1983; Coie, Dodge, & Coppotelli, 1982), were suggested as suitable measures for coach-athlete and athlete-athlete connections, respectively, while the Pro-social and Antisocial Behaviour in Sport Scale (PABSS; Kavussanu & Boardley, 2009) was proposed to measure character. This collection of measures has the advantage of being comprised of instruments that have previously been used and validated with similar samples and does appear to address a significant gap in the literature to date. Utilising existing conceptual measures can be advantageous in order to more rapidly progress research in this developing area. However, a more thorough assessment of the reliability and validity of the instruments within sport and as measures of positive development is fundamental to the progression of this approach. In reporting initial feedback from a recent pilot of the proposed battery of measures, the authors state that participants did not experience any excessive difficulty in completing the tests, and required only minimal direction from the researchers. This was within a North American sample aged between 10 and 18 years of age which suggests the efficacy of this measurement tool for future research.

### **Limitations and Future Directions**

A significant amount of research has been generated under the umbrella of positive youth development over the last five years. However, whilst the area has gained momentum, there remain a number of significant limitations with the work conducted to-date and, as such, there are several avenues for exploration.

First, the transition of the area from developmental psychology into the sport domain has resulted in the transfer of a number of differing conceptual frameworks with specific assets considered noteworthy for our developing youth to attain; namely, Lerner's 5Cs and Benson's 40 developmental assets. However, as noted previously,

there is concern as to the applicability, relevance and presence of the assets contained within these frameworks within a sporting population (Jones et al., 2011). In an attempt to address this, Côté and colleagues have adopted the 4Cs of coaching effectiveness (confidence, competence, connection and character/caring) and have conducted a series of reviews detailing the relevance of these assets within sport. However, to-date, no empirical study has tested the existence of this model within the sport domain. Indeed, Strachan et al. (2011), in their investigation of positive youth development in elite contexts, acknowledged that this particular sporting environment provided opportunities for and even required the development of additional physical, personal and social skills. Further support for the requirement of additional assets was found by Vella et al. (2011) who reported that coaches considered the eight areas of competence, confidence, connection, character, life skills, climate, positive affect and positive psychological capacities as important factors to focus on developing within their athletes. Indeed, the inclusion of the significant body of research that encompasses research into the development of life skills has resulted in even more concepts being added to the confusing array of assets that we believe are important for our athletes to attain through sport participation. Gould and colleagues (e.g., Gould et al., 2006, 2007) noted the importance of more sport-specific assets such as personal responsibility, motivation, communication, dealing with pressure and managing expectations, while other researchers have discussed broader categories of personal and interpersonal skills (Jones & Lavallee, 2009a). Despite this, Vella et al. noted that, “the existing literature is not comprehensive enough to capture the entirety of outcomes desired by youth sport coaches, with coaching practitioners seeing themselves as responsible for more areas of positive youth development than have been systematically argued through the literature” (p.45). They believe coaches go further than the 4Cs of coaching effectiveness, the 5Cs of youth development and life skills development.

The predominant qualitative and, hence, exploratory and descriptive nature of the work conducted within the field to-date has perpetuated this confusion, resulting in a jingle jangle effect (Marsh, 1994) where different terms are used to describe similar concepts. This creates confusion for readers and researchers alike, making comparability between studies and the development of appropriate measurement tools difficult. Furthermore, the language used to describe the key assets (e.g., competence, confidence, connection, and character) is challenging and it can be difficult for readers to differentiate between constructs (e.g., competence and confidence). Nevertheless,



'sport' is a general term in many ways, as it typically encompasses physical activity across a variety of settings (e.g., school, community, club) and competitive levels (e.g., recreational, competitive, elite), with differing interpersonal dynamics (e.g., individual, team) and a vast array of activities (e.g., swimming, tennis, football, hockey). Therefore, it should be expected that, collectively, positive youth development viewed through a *sport*-centric approach will be as likely to result in the wide-ranging collection of terms as that which we have seen. What is perhaps more appropriate and relevant is a sport-specific approach to positive youth development, beginning with the selection of internal assets relevant to that particular sport, and then progression toward development of an understanding of the strategies, interactions, influences and activities that should be promoted within each sport. The vast majority of work in positive youth development thus far has focused on participants across a variety of sports.

Related to this issue of conceptual clarity, is the need to develop a wider cultural understanding of positive youth development. With the exception of the work by Jones and Lavalley (2009a, 2009b) and Vella et al. (2011), the positive youth development research has been undertaken exclusively within North America. Ecological systems theory recognises this as a significant limitation of the research and limits the generalisability of the work in this field to positive youth development in, for example, Europe and the United Kingdom. The holistic approach predicated by systems theory recognises the impact of the top down effects influenced by the wider social, cultural and political context that forms the macrosystem. The focus of youth sport within the UK has increasingly moved towards institutionalised talent development for success on the international arena. This is largely due to the formation of organised sporting bodies such as UK Sport and Sport England, who are recognised as administrators for allocation of funding and development within sport, with the expectation of earning considerable returns on their substantial investments. At the elite level, a total of just over £343 million has been made available for British Olympic and Paralympic sport to prepare for Rio 2016, with British Swimming ranked as the fifth most supported sport (behind rowing, cycling, athletics, and sailing) receiving just under £21 million (UK Sport, 2014). This level of investment brings with it considerable pressure for those in charge to produce results in order to perform and meet the medal targets that all funded Olympic sports within the UK must set. This results in a top down performance focus from within the macrosystem of British Swimming, which further results in the organisation investing in the development of a skilled talent development team to

support the implementation of a Long Term Athlete Development plan. This plan creates a pathway structure for athletes whereby young athletes participate in a highly structured and performance-focused environment from a young age. This is strikingly different from the sporting contexts that have been studied thus far within the North American landscape. The talent development network within North America and its impact upon community youth programmes may be vastly different from that within the UK, and so the impact of this on young people's development needs to be considered.

A significant amount of research has been conducted within both the wider positive youth development framework and within the area of life skills which investigates coach perspectives on development. However, this research has been exclusively qualitative in nature and it has focused on developing a greater understanding of the specific strategies used to develop a range of internal assets. Whilst qualitative research allows the researcher to delve into the idiosyncratic nature of development, it is limited by the lack of generalisability to larger populations as each specific microsystem presents its own contextual demands and resources. Furthermore, an assessment of a small selection of coaches across a variety of sports does little to advance knowledge of the effects of policy, education and culture at a macrosystem level, thereby limiting applicability of research findings to sports policy makers and national governing bodies of sport. Research that aims to create impact needs to examine cultural norms within an organisation in order to generate results that are representative of the larger coaching population within that organisation, so that it becomes easier to understand where to target education and interventions. McCallister et al. (2000) found disparity between coach intentions and behaviours, with some coaches struggling to describe what exactly it was that they did to develop life skills, whilst others described behaviours that appeared at odds with their stated philosophies. Given that the sporting context has been found to experientially assist with life skills development (Jones & Lavalley, 2009b), a focused approach to asset development is a key premise of positive youth development. Therefore, a more in-depth examination of the opinions and perceptions of coaches towards psychosocial development may be necessary to understand why some coaches are able to 'talk the talk' but not 'walk the walk.' An extension of this would also be to develop an understanding of the characteristics of coaches who valued and implemented psychosocial development over and above those who did not, addressing such a call from Gould and Carson (2008).

Supportive interactions from significant others have been purported as a significant element in assisting with the goal of the development of internal assets within a positive youth development approach. The main focus of research within the sport domain has centred on the coach as the main external asset. However, parental interactions are considered integral to development and success within sport (e.g., Bloom, 1985; Côté, 1999; Wylleman & Lavallee, 2004). Nevertheless, very few studies have considered the parent's perspective of positive youth development. Parental influence is thought to permeate across domains via dominant parenting styles that influence the behaviors which parents exhibit in individual domains (Baumrind, 1989). These styles are influenced by parental values and beliefs about the correct way to behave. Research within positive youth development needs to widen its focus in order to develop an understanding of the role and influence of parents within positive youth development through sport. One approach may be to develop an understanding of what parents want for their children in sport. Researchers and academics continually extol the importance of positive youth development through sport, but it has not yet been established whether parents want their children to develop these internal assets. Also, it is not known to what extent parents value the presence of these assets within their children, and/or what do they do to assist with the development of these assets. With the support role being so prominent within positive youth development, a more in-depth examination of the social support that parents provide would be beneficial and aid in developing our understanding of the mechanisms of development.

Finally, any investigation of development must acknowledge the developing individual's perspective in order to fully appreciate the impact and influence of others on them. The athlete's perspective of positive youth development has received more attention within the research conducted to-date, particularly from a quantitative perspective, through assessment of an individual's positive youth development experiences via either the Youth Experiences Survey (YES: Hansen & Larson, 2005) or the Developmental Assets Profile (Search Institute, 2004), and by way of examination of the impact on particular outcomes such as enjoyment, burnout and perceptions of climate. However, issues with the psychometric properties of both measures have been noted, and even more so with the YES-2 which is a sport-specific version developed by McDonald et al. (2012). Nevertheless, whilst studies have looked at the impact of coach behaviours on psychosocial outcomes as measured by the YES-2 (Gould et al., 2012; Gould & Carson, 2010, 2011), no studies have looked at the impact of parental

behaviours on psychosocial development within the context of sport. Furthermore, positive youth development emphasises the *supportive* interactions of coaches and parents which suggests that investigating athletes' perceptions of social support from both sources would progress our understanding of how these supportive interactions influence development of internal assets.

### **The Present Thesis**

In drawing this review to a close, there are a number of key platforms upon which positive youth development researchers can build which extend the important work of initial investigations. In particular, based on the findings of this review, the importance of a focused approach is evident as a means to ensure the best possible support for coaches, athletes and parents within a particular environment. A targeted approach is required for the *what* (e.g., the most appropriate assets) and the *how* (the most effective systems approach), in order to nurture athletes to be 'better people' and, by the same token, to develop individuals who are 'the best possible athletes they can be'. Therefore, the main aim of this thesis was to understand how a positive youth development approach might be applied to and integrated within the performance environment of British swimming. This thesis commences with a focus on identifying the key internal assets of development in this performance context. Subsequent chapters build upon that exploration, whilst maintaining and adhering to the integrity of the findings from the initial identification and clarification of key internal assets.



# Chapter Three

Study One: Positive youth development in swimming: Clarification and consensus of key psychosocial assets

The previous chapter provided a comprehensive historical overview of positive youth development and the research that has been conducted in the area in both developmental and sport psychology over the last 20 years. However, despite existing research reinforcing the important, if not equivocal, role of sport in youth development (e.g., Larson et al., 2006), the application of psychosocial skill development in competitive sport contexts in the United Kingdom (UK) remains limited. Beyond the relative infancy of developmental youth sport psychology programmes within UK sport federations, a closer examination of the literature provides some explanation as to why this may be the case. There appears to be a lack of clarity around the fundamental assets associated with positive youth development and it is this specific issue within the context of UK sport that forms the rationale for the present study.

### **Clarifying the Assets**

In recent years, several frameworks (e.g. Benson et al., 1998; Lerner et al., 2000) have been created that aim to define the important assets of positive youth development, each utilising a variety of terms to describe seemingly similar constructs. The following points serve to clarify just how diverse (yet associated) these frameworks have become within the youth development literature.

Benson and colleagues (1998) describe their 40 developmental assets comprised of both internal and external assets. Internal assets make up the categories of commitment to learning, positive values, social competencies and positive identity that are considered to be gradually developed over time through internal processes of self-regulation. External assets, conversely, can be aligned to the categories of social support, empowerment, boundaries and expectations and also constructive use of time; i.e., assets that can be reinforced and developed by the community within which young people reside. Later, Lerner and colleagues proposed the 5Cs of competence, confidence, connection, character, and caring, allowing for the formation of a sixth C, contribution, when these 5Cs are actualised within the individual (Lerner et al., 2000).

More recently, the Collaborative for Academic, Social and Emotional Learning (CASEL), has identified five core competencies that positively contribute to the development of young people, namely, self-awareness, self-management, social awareness, relationship skills and responsible decision making (Weissberg & O'Brien, 2004). In addition, Catalano, et al. (2004), in their review of positive youth development programmes, identified fifteen constructs that were targeted for

development. These were stated as: (a) bonding, (b) resilience, (c) social competence, (d) emotional competence, (e) cognitive competence, (f) behavioural competence, (g) moral competence, (h) self-determination, (i) spirituality, (j) self-efficacy, (k) clear and positive identity, (l) belief in the future, (m) recognition for positive behaviour, (n) opportunities for pro-social involvement and (o) pro-social norms.

When turning to the developmental literature in youth sport, this confusion is heightened by the introduction of sport-specific assets considered important to be successful in this domain. For example, Harwood (2008) recently employed an alternative 5Cs framework utilising the concepts of commitment, communication, concentration, control, and confidence and successfully integrated coaching behaviours to develop these assets into the practice of professional youth soccer coaches. These assets were proposed to equip players with those positive psychosocial assets that would assist both soccer performance and personal development in an academy setting. Prior to this, Orlick and Partington's (1988) findings were further developed by Abbott and Collins (2004) and more recently by Bailey et al. (2009) and MacNamara, Button and Collins (2010a, 2010b) who all highlight the importance of goal setting, realistic performance evaluations, imagery, planning and organisational skills, commitment, competitiveness, focus and distraction control, coping with pressure, self-awareness and self-belief. Further relevant developmental constructs forwarded by academic scholars within sport have included initiative, respect, leadership and teamwork (Holt et al., 2008), discipline, commitment and resilience (Holt & Dunn, 2004) and cooperation, assertion, responsibility, empathy and social control (Côté, 2002).

Research investigating positive youth development through sport has become more prevalent in recent years, and once again has added further concepts to the equation. For example, Holt et al. (2012) considered how a physical education and sport programme at an inner city school could in itself develop youth in a positive way. The main developmental outcomes supported here were empathy and social connections. Vella et al. (2011) reported how coaches valued developing competence, confidence, connection, character, life skills, climate, positive affect and positive psychological capacities in their athletes. However, when Jones et al. (2011) investigated the empirical validity of Lerner's 5Cs in a sample of 159 young athletes, they did not find support for the latent dimensionality of the 5Cs. Instead, only two

factors representing pro-social values and confidence/competence emerged within this sport context.

In an attempt to clarify any growing confusion, Côté et al., (2010) adopted a collapsed version of Lerner's 5Cs. Referred to as the 4Cs of coaching expertise, Côté et al. adopted the three constructs of competence, confidence, connection, and combined those of character and caring/compassion to form a fourth C of character/caring. These 4Cs were then integrated into Côté's previously developed Coaching Model (Côté, Salmela, Trudel, Baria, & Russell, 1995) as the coach's objectives for athlete development. However, as with Lerner's original framework, the specific properties and developmental assets that actually comprise each C remains unclear and evidence of a scientifically rigorous content analysis of prior literature during the development of this framework appears to be absent. Hence, there appears to be no clear rationale underpinning the selection of these particular assets over all others, suggesting the need for a more in-depth approach to the formation of a collection of developmental assets for sport, or indeed, specific sports or cultures.

In summary, while research to-date has proven highly beneficial in advancing our understanding of youth development, the use of different models and terminology has made it difficult for readers to compare studies and to ascertain which assets are important when looking at both the general and sport-specific psychosocial development of young athletes.

### **The Cultural Context of Positive Youth Development**

As has been previously mentioned, the context within which positive youth development occurs should be specifically structured to encourage the most positive development within our youth. However, within the United Kingdom, the implementation by many national governing bodies of sport of a Long Term Athlete Development plan has created a pathway structure that, in turn, has generated a highly structured and performance-focused environment. One such organisation that has committed to such a development plan is the Amateur Swimming Association (ASA) in England and the overarching national body - British Swimming. There are 1,151 registered swimming clubs in England alone, with 192,765 registered competitive swimmers (ASA, 2012). Within the UK, the majority of learn-to-swim programmes are attached to registered clubs, the smaller of which provide a feeder pathway to progressively larger club programmes, allowing the committed swimmer to transition



through ‘talent’, ‘development’, and then ‘podium’ selection programmes operated by British Swimming on behalf of UK Sport. Athletes are eligible to qualify for ‘talent’ from the age of 12, and the most talented are selected from the annual National Age Group Championships. While there is evidence to suggest that early specialisation in particular sports can be beneficial (Côté, 1999), the exposure to such a performance-focused environment from a young age may have a detrimental effect on the positive benefits of sport participation which can be gained from a more developmental focus (Bailey et al., 2009; Côté, 1999; Wylleman et al., 2004). It may also mean that these sporting environments do not conform to the requirements of positive developmental settings as previously defined by NRCIM (2004). Taking account of these critical considerations and to advance the youth development literature in sport, the objective of this study was to review and synthesise the existing and diverse literature to offer a more concise conceptual understanding of the key assets considered important for the optimal psychological, social, and emotional development of young swimmers. By focusing specifically on competitive youth swimming, we investigated expert perceptions of the necessary psychosocial assets for British youth swimmers. This study is therefore comprised of two distinct and progressive stages, accounting for the importance of interpreting prior literature to appropriately facilitate a sport-and culture-specific position on positive youth development.

## **Method**

### **Design**

To achieve the objective of the study, an interpretative approach was taken in which the ontological position was one of constructivism and the epistemological approach was one of interpretivism. Ontologically, this approach recognises that there are multiple realities and acknowledges researcher influence in the construction of the reported reality (Sparkes & Smith, 2009) while the epistemological assumption accepts subjective interaction with others in order to access the social realities that exist in people’s minds and that, “the basis of truth, or trustworthiness, is social agreement” (Smith, 1984, p.386). Underpinned by these ontological and epistemological assumptions, the study adopted an ideographic, hermeneutical and dialectical methodology which directly influenced the methods used in each stage of the research (Sparkes, 1994). Stage 1 incorporated an in-depth review of youth development literature and a hierarchical content analysis that extracted and positioned all

psychosocial terms mentioned. This stage was completed by employing Gerring's (1999) critical framework of concept formation to group the resultant terms into 17 key constructs. Specifically, the following eight criteria were used to determine the appropriate grouping of terms and the overall name for each psychosocial construct: (a) familiarity (how familiar the concept is to a lay or academic audience); (b) resonance (to what extent the term has meaning for the interpreter); (c) parsimony (the extent of brevity for the term and its list of defining attributes); (d) coherence (the sense in which the attributes that define the concept, as well as the characteristics that actually characterise the phenomena in question, 'belong' to one another); (e) differentiation (the extent that the attributes and characteristics are distinct from other concepts; how operationalisable the concepts are); (f) depth (how many accompanying properties are shared by the concept); (g) theoretical utility (how useful the concept is within its academic field) and (h) field utility (how useful the concept is within a relevant and related area). Gerring surmises that concept formation is "a highly contextual process" (p.366) during which there is a "tug of war among these eight desiderata... a set of choices which may have no single 'best' solution, but rather a range of more-or-less acceptable alternatives." (p.367). Within this study, each of these eight criteria were considered in their own right in regards to the final distribution of assets. Stage 2 of the study then utilised a dialectical methodology in which in-depth interviews were conducted with a panel of 10 British experts from both professional (coaches and practitioners) and academic fields within swimming and youth sport. These interviews enabled detailed insights into coach experiences within swimming and academics' perceptions surrounding the meaning and understanding of these concepts and terms in a swimming context. Specifically, these interviews were used to create a more reflexive process and to introduce the idea of a critical friend (Smith & Sparkes, 2006). The decision to base these interviews within a sport-specific context was taken to enhance the relevance of the resultant assets for the culture of competitive youth swimming.

Swimming was chosen as the sport within which to base this study due to the high participation numbers in the UK combined with the high level of investment that is required by athletes from a young age and, therefore, the increased potential for influence by coaches on athlete development. Swimmers report spending between 16 and 40 hours a week in training and report the same amount of contact time with their

coaches (U.K. Sport, 2008). Hence, there is considerable opportunity for coaches to affect the development of youth swimmers and, thus, a responsibility for coaches to provide positive developmental experiences (Vella et al., 2011). Furthermore, the first author participated in an international career in swimming that spanned over a decade and therefore brought in-depth knowledge about the specific psychological, social, and organisational demands of the sport. These intrinsic insights assisted in rapport building with interviewees and facilitated a richness of conversation with expert participants (Corbin & Strauss, 2008).

### **Stage One: Method and Results**

#### **Review of Literature and Concept Formation**

**Sources.** Papers that were published in peer reviewed journals and in the English language prior to 2010 were included in the content analysis. These were found through three main sources: (a) electronic searches of online databases using MetaLib including ASSIA, Medline, PsychArticles, PsychInfo, SPORTDiscus, Web of Science, and Zetoc; (b) citations in papers identified by the electronic searches; and (c) manual searches of relevant sport and developmental psychology journals such as the Journal of Sport and Exercise Psychology, The Sport Psychologist, Journal of Applied Sport Psychology, Psychology of Sport and Exercise, and Child Development. Papers with a key theme of positive youth development, positive youth development through sport, life skills, youth sport development, psychological and psychosocial skill development, or youth sport coaching were identified and analysed. These themes (i.e., ‘positive youth development’, ‘positive youth development through sport’, ‘life skills’, ‘youth sport development’, ‘psychological’, ‘psychosocial skill development’, ‘youth sport coaching’) were used as the specific keyword search terms for Stage 1. In addition to these research papers, thematic articles that constituted literature reviews of youth sport, published in the English language in recognised text books, and focused on developmental themes, were also included in the review. All papers that were returned from the search referred to youth development in either a general or sport context, and sampled or discussed athletes between the ages of nine and 18 years of age or coaches who coached athletes within this age range. This search was conducted in 2010, hence the exclusion of papers beyond this date.

**Initial analysis.** Hard copies of all papers of interest were obtained and analysed for mention of specific psychological, social and/or emotional assets that were

considered important for positive development in either everyday living or for successful performance. This analysis took the form of a hierarchical content analysis which “focuses on the *whats* of storytelling in such a way that it can assist researchers in developing general knowledge about the themes that make up the content of the stories [research] collected” (Smith & Sparkes, 2012). A summary table was developed detailing the asset name, literature definition, and the cited paper (please see Appendix 1). Analysis of papers continued until theoretical saturation had been reached and no new terminology was forthcoming (Huberman & Miles, 2002). This resulted in the inclusion of 34 relevant, key papers which yielded 113 different terms used to describe constructs considered important for young people to acquire during their personal development. Twenty-eight of the 34 papers (82%) included in the review were North American in origin or involved participants of North American origin. Of the remaining six papers, four of these involved participants from the U.K. and one involved participants from Greece. The remaining paper reported on participants from both Canada and the UK.

**Concept formation and peer debriefing.** In line with Gerring’s (1999) critical framework of concept formation and in a fashion similar to that described by Gucciardi, Gordon and Dimmock (2008), terms were compared and contrasted with each other to identify similarities and differences between terms. This interpretative approach, allowed the first author, as the interpreter, to group like terms together into similar constructs to form a more concise list of assets considered important for positive youth development in a youth swimming environment. Definitions for these constructs were created using the existing literature definitions of the individual terms that combined to form the newly developed constructs, again utilising criteria from Gerring’s (1999) critical framework. The results of this part of the analysis were then disseminated to the second and third authors in their role as critical friends to individually study and separately respond to the first author in a separate reflexive process (Smith & Sparkes, 2006). These discussions resulted in a small number of changes to the concept groupings, with a further meeting to consider and finalise groupings and construct definitions before proceeding to the next phase of the enquiry. Stage 1 of the analysis resulted in the formation of 17 grouped constructs, the full results of which can be seen in Table 3.1. These psychosocial groupings now formed the stimulus material for the Stage 2 contextualisation process.

**Table 3.1. Initial conceptualisation and delineation of assets after Stage 1 analysis**

<b>Asset</b>	<b>Properties</b>	<b>Definition</b>
<b>Perceived Sport Competence</b> <sup>1,2,3,4</sup>	Self-efficacy <sup>5,6,7,8</sup> Self-concept <sup>9,10,11</sup> Sport confidence <sup>12</sup>	One's positive beliefs about capability or skill in swimming
<b>Self-Esteem</b> <sup>3,6,9,13,14,15,16,17,18,19</sup>	Confidence <sup>1,2,5,8,9,10,12,16,19,20,21,22</sup> Courage <sup>20,23</sup> Self perceptions <sup>4</sup>	One's overall general belief in self and ability
<b>Initiative</b> <sup>3,17,19,24,25,26,27,28</sup>	Goal setting <sup>4,7,9,10,12,16,17,18,19,20,22,23,25,26,27,28,29,30,31,33</sup> Ambitions <sup>32</sup> Time management <sup>5,8,9,23,25,27,28,29,30</sup> Planning <sup>6,7,12,13,19,28,29</sup> Organisation <sup>29</sup> Personal responsibility <sup>16,17,22,23,24,25,29,34</sup> Assertion <sup>6,16,20,33</sup> Assertiveness <sup>7</sup> Autonomy <sup>7,29</sup> Empowerment <sup>7,13,29</sup> Self-determination <sup>7</sup> Personal control in the future <sup>10</sup> Decision making <sup>1,5,6,7,8,10,13,33</sup> Judgment <sup>1</sup> Problem solving <sup>6,7,19,23,26,27,28,30</sup>	One's ability to set realistic goals, manage time and take responsibility for oneself
<b>Positive Belief in Future</b> <sup>6,7,10,13,19</sup>	Optimism <sup>12</sup> Dispositional hope <sup>12</sup> Positive attitude <sup>4,16</sup>	One's tendency to be hopeful and optimistic about future outcomes
<b>Clear and Positive Identity</b> <sup>7,19</sup>	Identity exploration <sup>6,17,25,30</sup> Identity reflection <sup>25,28,30</sup> Self-aware <sup>12</sup> Personal power <sup>13</sup> Sense of purpose <sup>13</sup>	One's clear sense of self that typically evolves from trying new things, gaining self-knowledge and learning one's capabilities
<b>Discipline</b> <sup>3,9,22,29</sup>	Sacrifices <sup>22,29</sup> Restraint <sup>13</sup> Resistance <sup>6,13</sup> Overcoming peer pressure <sup>29</sup> Acquisition of a mature personality <sup>9</sup> Learning to be mature <sup>29</sup> Maintenance of physical health <sup>34</sup> Healthy lifestyle <sup>20</sup>	One's ability to make oneself <i>do</i> things one knows one should do even when one does not want to and includes making sacrifices in other areas of life to ensure maintenance of appropriate and/or healthy habits

**Table 3.1. Initial conceptualisation and delineation of assets after Stage 1 analysis  
(continued)**

<b>Commitment</b> <sup>13,21,22</sup>	Motivation <sup>1,4,9,13,17,22,32,34</sup> Effort <sup>9,17,19,25,26,27,29,30</sup> Determination <sup>22,29</sup> Perseverance <sup>1,29</sup> Persistence <sup>19,23,27,29</sup> Engagement <sup>13</sup> Work ethic <sup>9,12,17,18,34</sup> Hard work <sup>29</sup> Focus on personal performance <sup>20</sup> Competitiveness <sup>9,12</sup> Learn from mistakes <sup>19</sup> Adaptive perfectionism <sup>12</sup> Drive <sup>12</sup>	One's tendency to pursue high personal standards with a focus on the value of effort, mastery, and self-improvement
<b>Cooperation</b> <sup>1,16</sup>	Teamwork <sup>3,6,8,9,17,18,19,20,23,24,25,26,27,28,29</sup> Connection <sup>2,17,18</sup> Bonding <sup>13</sup> Group process skills <sup>30</sup> Integration and links to adult and community <sup>17,25,28,30</sup> Social capital <sup>8,25,28</sup> Sense of belonging <sup>8,9</sup> Peer acceptance <sup>19</sup> Developing peer relationships <sup>8,17,25,28,30</sup> Developing relationships <sup>29</sup> Create friendships <sup>8</sup> Create meaningful relationships <sup>8</sup> Interpersonal competence <sup>9,13,19</sup>	One's ability to work with and help others, generally towards achieving a common goal
<b>Communication</b> <sup>5,7,8,19,21,23,24,25,29,34</sup>	Listening <sup>25,34</sup> Feedback <sup>23,25,30</sup> Social skills <sup>6,8,9,12,17,19,25,28,29</sup>	One's ability to listen and to give and receive feedback and non-verbal behaviour
<b>Conflict Resolution</b> <sup>7,13,29</sup>	Negotiation <sup>7,8</sup> Compromise <sup>8</sup>	One's ability to peacefully resolve disagreements via negotiation and compromise
<b>Moral Competence</b> <sup>4,7,9,18</sup>	Character <sup>2,5,18</sup> Integrity <sup>1,13,16</sup> Honesty <sup>13</sup> Courtesy <sup>1</sup> Sportsmanship <sup>1,4,12</sup> Respect <sup>9,17,24,29,30</sup> Valuing diversity <sup>20,28,34</sup> Conformity <sup>19,22,23,30</sup>	One possesses a respect both for others and for set rules and boundaries along with an understanding of the difference between right and wrong and the importance of being honest, even when it is not easy

**Table 3.1. Initial conceptualisation and delineation of assets after Stage 1 analysis  
(continued)**

<b>Emotional self-regulation</b> <sup>17,20,25,26,30</sup>	Emotional control <sup>9,18,19,27</sup> Self control <sup>1,16,23</sup> Relaxation <sup>4,16,20</sup> Stress management <sup>4,5,16,25,26</sup> Control <sup>21</sup> Self-talk <sup>7,12,20,21,26</sup> Ability to perform under pressure <sup>22,23,29</sup> Handle success and failure <sup>19,23</sup> Imagery <sup>4,12,16</sup> Concentration <sup>17,21</sup> Managing distractions <sup>9,12,29</sup> Dealing with fatigue <sup>29</sup> Ability to cope with and control anxiety <sup>12</sup> Self-management <sup>7,19</sup> Ability to focus <sup>12</sup>	One's ability to control anger and anxiety, prevent emotions from interfering with attention and performance, acquire strategies for managing stress and to use positive emotions constructively
<b>Leadership</b> <sup>1,3,5,8,9,19,24,25,28,29,30,34</sup>	Contribution <sup>31</sup>	One's ability to give back to the swimming community through encouragement of young swimmers and acting as a positive role model
<b>Empathy</b> <sup>16,25,29</sup>	Caring <sup>2,13</sup> Emotional competence <sup>7</sup>	One's ability to share and show concern for someone else's feelings, experiences or viewpoints by imagining what it would be like in their situation
<b>Resilience</b> <sup>7,11,22,29</sup>	Overcoming adversity <sup>19,33,34</sup> Overcoming setbacks <sup>19</sup>	One's ability to use coping strategies to bounce back and to overcome obstacles
<b>Self-Appraisal</b> <sup>19</sup>		One's ability to examine and monitor one's strengths and areas for improvement
<b>Mental Toughness</b> <sup>9,12,16</sup>		One's psychological edge that enables positive coping strategies to ensure consistent swimming performance and includes self-belief, desire/motivation, dealing with pressure and anxiety, performance and lifestyle related focus, and pain/hardship factors

**Table 3.1. Initial conceptualisation and delineation of assets after Stage 1 analysis (continued)**

Weiss (2008)<sup>2</sup> Lerner et al. (2000)<sup>3</sup> Côté & Fraser-Thomas (2007)<sup>4</sup> Weiss (1991)<sup>5</sup> Gould et al. (2007)<sup>6</sup> Petitpas et al. (2004)<sup>7</sup> Catalano et al. (2004)<sup>8</sup> Camiré et al. (2009a)<sup>9</sup> Hedstrom & Gould (2004)<sup>10</sup> Danish & Nellen (1997)<sup>11</sup> Schulman & Davies (2007)<sup>12</sup> Gould, Dieffenbach, & Moffett (2002)<sup>13</sup> Benson et al. (1998)<sup>14</sup> Smith, Smoll, & Curtis (1979)<sup>15</sup> Smoll, Smith, Barnett, & Everett (1993)<sup>16</sup> Côté (2002)<sup>17</sup> Holt & Sehn (2008)<sup>18</sup> Gould & Carson (2008)<sup>19</sup> Petitpas et al. (2005)<sup>20</sup> Brunelle et al. (2007)<sup>21</sup> Harwood (2008)<sup>22</sup> Holt & Dunn (2004)<sup>23</sup> Papacharisis et al. (2005)<sup>24</sup> Holt, Tamminen, Black, Sehn, & Wall (2008)<sup>25</sup> Dworkin et al. (2003)<sup>26</sup> Holt & Jones (2008)<sup>27</sup> Larson et al. (2006)<sup>28</sup> Hansen et al. (2003)<sup>29</sup> Jones & Lavallee (2009a)<sup>30</sup> Hansen & Larson (2005)<sup>31</sup> Lerner et al. (2005)<sup>32</sup> Holt & Morely (2004)<sup>33</sup> Theokas et al. (2008)<sup>34</sup> Scales et al. (2000)

## **Stage Two: Method and Results**

### **In-depth Expert Interviews**

Ten experts were recruited to critically appraise the 17 grouped constructs, with specific reference to the asset names and properties, the definitions for use in youth swimming, and the applicability and accessibility of terminology used for coaches. Experts were purposively selected (Corbin & Strauss, 2008) in line with meeting certain criteria, such as those used in Abraham, Collins and Martindale (2006), including: (a) being recognised by peers as an expert in their chosen profession, (b) displaying evidence of having the ability to think critically, (c) engaging in a mentoring role to developing others, and (d) having had experience of, or currently working with, both elite and developmental athletes. All of the experts met at least three of the criteria; and critical thinking ability was evidenced through the collaborative interview process with each expert and in some cases additionally by academic qualifications (e.g., relevant peer-reviewed publications). Coach experts were also selected after observation of coaching behaviours, during which time coaches demonstrated a holistic approach to coaching and performance, aspects that were valued by the authors. Anecdotal swimmer reports were also considered in this regard.

**Participants.** Eleven participants were initially contacted by email and invited to participate in the study, with 10 agreeing and being available to take part. The participants were aged between 32 and 61 years of age ( $M = 44.6$ ,  $SD = 10.67$ ) and were comprised of eight male and two female participants. Four of the experts were swimming coaches with a combined total of 108 years of coaching practice, ranging between a minimum of 15 to a maximum of 35 years each. They had extensive knowledge of both age group and elite level swimming, with all coaches having developed Olympians through their respective age group programmes in addition to



coaching on British teams at international level. Two of the four were employed by British Swimming [the national governing body] in a coaching and development role while a third was working with current members of the British Swimming squad at the time of the research. The fourth coach was also a youth sport researcher and teacher. The remaining six participants comprised practitioners and academics with consulting experience in youth swimming or established research portfolios in youth sport and coaching. One of these academics was an ex-international swimmer who also provided extensive sport psychology support to international and age group swimmers (NB: this expert is not the author of this chapter). A further practitioner/academic had extensive experience in youth sport working alongside coaches and possessed extensive knowledge of coach education programmes within the UK.

**Interview procedure.** Experts were given between seven and 21 days to critically review the concept groupings in detail, and were asked to note their thoughts on the 17 grouped constructs through the use of a questionnaire (please see Appendix 2). Specifically, with the context of competitive youth swimming in mind, experts were asked to consider five key questions and note if they ‘agreed’, ‘disagreed’, or were ‘unsure’. The questions were: (a) does the overall name in bold accurately capture all those within the group? If not, please circle which other asset best describes the group or suggest an alternative group name; (b) do any assets need to be measured separately? If yes, please note which ones; (c) are all the assets in the correct groups? If not, please suggest which groups they should be in; (d) do you think the definition is accurate? If not, please suggest an alternative; and (e) do you think the definition is clear and will be easily understood by coaches? If not, please suggest an alternative. Participants were also informed that this study was directly focused on the sport of swimming and the instructions on the questionnaire asked participants, “when considering these assets, please ensure you are primarily reflecting on the individual in their athletic domain.” Individual interviews with the first author were then conducted with each expert to gain further insight into their thoughts and opinions on the concept groupings. These interviews ranged from 20-121 minutes in length ( $M = 61:00$ ) and were iterative in nature so that, as new ideas emerged during one interview, they were proposed to the next participant to encourage collaboration and aid social agreement (Smith, 1984).

**Subsequent analysis.** Individual interviews were recorded and transcribed verbatim, yielding 294 pages of data. Interview data was used in conjunction with

questionnaire data to form individual participant profiles in reference to both the concept groupings and the asset definitions (please see Appendix 3 for an example). Participant profiles took the form of a table where one column included the original asset and definition and the other column matched this to the participant's response of what they felt the correct asset and definition for this group should be. Where there was disagreement between questionnaire and interview data, the latter took precedent as interviews provided the opportunity for discussion and hence increased clarification of thoughts and opinions. Differences between the original and the participant-generated assets were highlighted on each profile before comparing and contrasting each profile, to note the assets that generated the most differences from the original. Decisions upon whether changes to concepts were necessary were primarily made on a quantitative basis; that is, if five or more participants indicated concern with, or suggested a change in concept grouping or definition, the concept and/or definition was adjusted accordingly. However, interpretative decisions were required on occasion to ensure academic and conceptual accuracy and also accessibility of lay use for coaches, both of which were issues that were at the forefront of the final analysis. This analytical process allowed the development of a final grid, which the final concept groupings of each psychosocial asset. Changes were made to the overarching asset names and many of the definitions; and these can be observed by viewing the similarities and differences between Tables 3.1 and 3.2. Significantly, the majority of experts proposed the need to group the assets into higher order categories that represented key component areas within individual development. The names and groupings of these categories were alluded to by the experts, however, interpretive analysis by the first author was necessary to finalise the concept groupings.

A reflexive discussion with the second and third authors once again occurred at this stage of the analysis to further support the contextualisation of the final concept groups. This process resulted in minor changes to higher order theme groupings and led to improved clarity within selective conceptual definitions. Following this, the interview transcripts and final concept grid were distributed to each expert for consideration before final follow-up interviews to evaluate participant satisfaction with the data analysis and to gain their critical appraisal of the final collective grouping of psychosocial assets. The final assets, their properties, consensual definitions and higher order groupings are illustrated in Table 3.2.

**Table 3.2: Final conceptual grouping of assets following Stage 2 Consensus Validation**

<b>Grouping/Asset</b>	<b>Definition</b>
<b>SELF PERCEPTIONS</b>	
Perceived Sport Competence	Positive beliefs about capability or skill in swimming
Self-Esteem	Overall general self-worth
Clear and Positive Identity	A clear sense of self characterised by high self awareness and a clear purpose in life
<b>BEHAVIOURAL SKILLS</b>	
Organisation	The ability to manage and take responsibility for self in order to achieve planned goals
Discipline	Choosing daily behaviours that are in line with achieving planned goals
Self-Appraisal	The ability to examine and monitor individual strengths and areas for improvement
<b>SOCIAL SKILLS</b>	
Communication	The ability to listen and to give and receive feedback and non-verbal behaviour
Conflict Resolution	The ability to resolve disagreements via negotiation and compromise
Cooperation	The ability to work with and help others, generally towards achieving a common goal
Leadership	The ability to motivate and encourage others and to act as a positive role model through the expression of desirable behaviours
<b>APPROACH CHARACTERISTICS</b>	
Character	A respect both for others and for set rules and boundaries along with an understanding of the difference between right and wrong and the importance of being honest, even when it is not easy
Positive attitude	A tendency to be hopeful and optimistic about future outcomes
Motivation	A self-directed tendency to pursue high personal standards with an emphasis on the value of effort, mastery of skills, self-improvement and competitiveness
Resilience	The ability to bounce back and to overcome obstacles
<b>EMOTIONAL COMPETENCE</b>	
Empathy	The ability to share and show understanding for someone else's feelings, experiences or viewpoints by imagining what it would be like in their situation
Emotional self-regulation	The ability to control both positive and negative emotions in order to prevent them from interfering with attention and performance and to learn to use them in a constructive manner.
Connection	The ability to care for and bond with others in order to create meaningful relationships and develop a sense of belonging

## **Contextual Insights from Coaches and Academics**

While the individual interviews with expert participants (C= Swim coach; A= Academic; SA= Swim/Academic expert) provided a means of contextualising the assets, the interview process yielded a number of additional observations that served to challenge, inform and empower the practical applicability of such a collection of assets in British swimming.

**Accessible language.** A consistent message from the swimming experts in this study was the need for conceptual language that was readily comprehensible to coaches. The necessity for this was highlighted by the fact that all three coaches in their first interviews commented on their current lack of understanding of the academic language used in sport psychology. For example, one coach stated, “not a lot of coaches have come from a high academic background. There’s a lot of coaches who have the intelligence and are very capable people but just haven’t come that route” (C3), thereby highlighting the need for a greater use of more generic and layman terms within both the applied and academic fields of sport psychology.

**Blueprint for performance and development.** In contrast to their earlier observations, however, a number of experts noted how the resultant assets served as the foundation for a blueprint to aid the psychological development of their swimmers. During his final member checking interview, Coach 3 suggested that the current assets offered a more understandable and relevant reference point for coaches.

It seems to be an on-going thing that people are not listening to what we’re [coaches] saying...they’re limiting their research because they’re not making it fit with what’s going on in the real world. Most of [what has gone in the past] is not understandable, it’s not written in formats that are easily useable...what you’ve done in three sheets of paper is usually a whole book...and, yes, I guess you would wanna’ expand on this but what you’ve got there as well is something pretty clear. You know, this is it, and then we’ll train you how to use them, but this is it - not reams and reams of ‘this is it’ that you get lost in and then just don’t have the slightest idea and that’s tended to be where this subject has been in the past, I think. (C3)

An academic added that the assets and their proposed structure successfully combines positive youth development and performance enhancement:

In a way which you can see how these things are useful for sport and for life and there isn't a kind of nasty junction between them which you do get on some life skills programmes where you just think they've just kind of hacked it on, but actually all these things are framed in a way which coaches would think, "ah yeah it would be really good if all my swimmers had these attributes" *and* they carry them outside of the sport context. (A5)

These sentiments were again echoed by another who commented that, "It makes a lot of sense...I can see how this is relevant to youth sport both from a psychosocial development, personal development and well-being perspective, but also from a performance enhancement perspective" (SA2).

An additional coach passionately referred to his experiences of coach education and the potential value of this collection of assets to the system:

In the coach education [general coach education provided by national governing body] it was about energy systems, technique, and even when you come to psychology it's about goal setting, strategies, rehearsal but really there's these other areas that a coach needs to understand, operating in an organisation like a club and relationships with parents, committee, and everything else, and with relationships with the swimmers...well, it's vital really...because... it's not just all about delivering sessions and delivering workouts...coaches rarely get to address these areas or receive information in these areas so I think it's important for them cos generally young coaches just learn by trial and error and they make mistakes as they go along...that upsets the dynamic of the whole team...maybe if they'd been aware of these areas then they might not have fallen into the trap in the first place so they've obviously not been made aware of these areas. (C2)

**Redundancy of mental toughness.** It is perhaps noteworthy that the construct of mental toughness was removed from the assets after the expert contextualisation phase of the analysis. It was considered important to include the asset in the initial proposal to allow a full expert analysis and to ensure that expert feedback guided the development of the final asset groupings. Six participants, however, questioned its inclusion, with one coach stating his opinion that there are large individual differences in how mental toughness is manifested in individuals that could cause measurement problems. This was an opinion echoed by an academic who also suggested that mental toughness was obsolete given the inclusion of all of the other assets, stating, "how

would you measure it without reverting to those assets” (A1). In essence, the overwhelming views of the participants was that, if swimmers possessed all of the other assets and were able to utilise them effectively at the necessary time, then they would, by definition, be mentally tough. In this way, mental toughness was interpreted as a redundant asset. The final follow-up interviews were unanimous in confirming these above points.

**Conflicting performance/development perspectives.** A small number of assets did prompt some conflicting viewpoints from the coaching experts, mainly in relation to their perceived relevance at a high performance level of swimming. One coach queried the category of emotional competence and the assets within it, stating that “in a competitive swimming environment I’m not exactly sure if it’s relevant...but in life in general...you’d hope!” (C2). Coach 3’s beliefs about the value of emotional competence were entirely different: “This is way harder than some of the others...emotions are what screw us up all the time...to me, this [emotional self-regulation] is a massively undervalued asset” (C3).

There appeared to be a conflicting understanding of the role that emotions can play in a high performance environment. This conflict was highlighted within the discussion of another asset, that of conflict resolution. One coach asked, “what does conflict resolution have to do as a part of performance sport?”, and he went on to say “it’s almost called ‘agree to disagree’. You can hate your coach, have the conflict and do the mutual user thing and go on to perform great things...it doesn’t have to be happy to be successful”(C1).

Interestingly, when discussing the asset of cooperation, the same coach also noted “don’t delude yourself into thinking just because people can cooperate they’re gonna’ be good young people” (C1). Overall, these observations highlighted a potential disparity between what the scientific literature championed as important for successful performance in sport and what the coaches involved in creating this success actually felt was important for swimming.

## **Discussion**

Sport continues to be viewed as a fundamental domain in which positive youth development outcomes may be achieved (Larson et al., 2006). However, previous research on general positive youth development has been based on data gathered within North American contexts (Benson et al., 1998; Hanson & Larson, 2005; Lerner et al.,

2000), and with limited scientific attention to positive youth development in sport (Côté et al., 2010; Gould & Carson, 2008).

Grounded in a British cultural context, this study aimed to consolidate knowledge of the key assets considered important for the positive psychological, social, and emotional development of young swimmers. With care taken to theoretically draw upon on the contributions of existing frameworks and to garner insights from expert coaches and youth sport academics, the resultant assets both complement and add to previous positive youth development research in sport.

In synthesising knowledge to achieve sport - and culture-specific outcomes, five categories of psychosocial assets emerged that represented 17 constructs from the current scientific literature. These categories were self-perceptions, behavioural skills, social skills, approach characteristics and emotional competence. Reflecting deductively on this final collective, there appear to be a number of appropriate conceptual compromises with existing models that are highly pertinent to athlete and personal development in sport. For example, in his model of youth development, Lerner refers to competence as a key asset and explains this as “the ability to perform adequately in the world” (2007, p.47) while citing social, academic, emotional, and vocational competence, as examples. In the current collective, three of the five categories represent the types of competence proffered by Lerner in his work, namely, behavioural skills (e.g., organisation, discipline, self-appraisal), social skills (e.g., communication, conflict resolution) and emotional competence (e.g., emotional self-regulation). It is evident that a number of different assets need to be developed to allow the individual to operate competently within a particular context. However, whilst Lerner, and Côté et al. (2010) in their recent adaptation of Lerner’s model to sport, acknowledge the need for underpinning assets, they are not made explicit in their respective higher order models. By identifying these lower-order assets, the current collective offers a more explicit classification of the skills and attitudes that may encompass broader competence development in young swimmers.

This greater specificity of asset is more characteristic of Benson and colleagues’ approach (1998) and their internal assets of self-esteem, motivation and conflict resolution are directly represented in the current collection of assets. Furthermore, their higher order categories of positive values, social competencies and a positive identity are reflected in the properties of approach characteristics (e.g., character), social skills

and self-perceptions, even if they are not labeled as specific assets. When turning to prior positive youth development literature in sport, assets such as discipline, resilience (Holt & Dunn, 2004), perceived sport competence and cooperation (Weiss, 2008) have been validated by experts in this study and appear to sustain relevance and meaning in swimming alongside their implicit value in other life domains.

In addition, care has been taken to offer a conceptually sensitive definition of each asset that is comprehensible to coaches working in swimming (Gould, Damarjian, & Medbury, 1999). For example, the ‘motivation’ asset reflects a self-directed tendency to pursue high personal standards with an emphasis on the value of effort, mastery of skills, self-improvement and competitiveness. Guided by underlying properties from the content analysis, this definition is informed by the extensive literature on the adaptive characteristics of self-determined, autonomous motivation (Deci & Ryan, 1985), in conjunction with the empirical evidence base supporting the value of high task (mastery-approach)/high ego (performance-approach) achievement goal profiles (Elliot, 2006; Nicholls, 1984) in competitive sport. Both the main and subsequent member checking interviews assisted in the refinement of these definitions, with coaches praising the clarity and value of each asset, even if there were some differing observations over relevance to their coaching role. These supplementary insights from coaches alert researchers to several important implications with respect to informing the utility of these assets within positive youth development work in British Swimming.

### **External Assets and Future Research Implications**

Fraser-Thomas et al. (2005) note that it is the regularity and quality of reciprocal social relationships experienced by athletes with coaches, parents and peers that underpin successful development and which are integral to effective programme design in youth sport. In this context, they are referring to the external assets (Benson et al., 1998) that embody the quality of the environment shaping the child, including access to positive role models, social support and positive peer influence. The application of the current collective of assets in swimming depends greatly on the perceptions and behaviours of the significant others (i.e., coaches, parents and practitioners) acting as external assets within the sport. Harwood’s (2008) developmental intervention in youth soccer was driven by the premise that internal (psychosocial) asset development in young players was facilitated by positive and confident adult and peer influences (i.e.,



external assets: coaches, parents, teammates), a view supported by Smith and Smoll (1990). A central issue in his study rested upon the low efficacy that soccer coaches possessed in fulfilling a psychosocial role and shaping psychological assets in young players. The programme, therefore, targeted improvements in coaches' knowledge, practice and ultimately confidence in their behaviours, strategies and interactions with players.

Consequently, a key objective of further research in swimming may be to establish the beliefs that coaches and parents hold in relation to these core psychosocial assets. If a swimming coach views his or her role in terms of solely technical and physical development, then the influence and value of the coach as an external asset is potentially diminished in terms of the psychosocial development of the swimmer.

As evidenced by coaches' responses to this collection of assets, a significant implication of the current study is the provision of categories for swimming coaches to aid their understanding of psychosocial assets and to limit feelings of being overwhelmed by the range of assets to consider. The five higher order categories provide coaches with a clarification of the main areas which they may consider when nurturing positive youth development within their athletes. With a greater awareness of these broad areas, they can then look to individual assets within each area to a greater degree. It is envisaged that swimming coaches may use this collection of assets in a number of different ways by incorporating consideration of relevant assets in their session plans. Swim coaches routinely write session plans with the objective of developing physiological outcomes and, hence, it is proposed that coaches may choose to emphasise a complementary psychosocial outcome within the confines of a natural training session more intentionally and creatively. Harwood (2008) successfully modelled this approach with the main difference being the inclusion of a player-centred log book that players could use to reflect upon their sessions and matches.

In terms of future practice or application, it is also possible that the perceived value, knowledge and relevance that swimming coaches hold for these 17 psychosocial qualities may ultimately influence their daily behaviours and interactions with swimmers. For those coaches who do place a high value on positive youth development in their programme, it may be interesting to investigate the different coaching behaviours and methods that they perceive themselves to employ with respect to promoting each asset (e.g., questioning style, autonomy support, modelling

behaviours, sharing experiences, planned dosages of stress). Tamminen and Holt (2012) recently offered an excellent illustration of this in terms of the strategies engaged by parents and coaches that facilitated adolescents' successful coping experiences in sport. Future research may investigate the impact that individual differences in coaches' and parents' knowledge base, confidence and value related to each individual asset can have upon the attention given to each asset within the differing stages of youth development. It is noteworthy that the elite coaches in this investigation possessed differing beliefs about the relevance of certain emotional and social skills within competitive swimming, as well as challenging academics to promote their work in a language accessible to coaches that would presumably enhance the inclusiveness of sport psychology in a coach's role (see Gould et al., 1999).

A further layer of complexity rests with the need to establish the developmental periods where significant others may most effectively contribute to the growth of each asset. It is important to consider the development of these assets in a staged and additive manner as opposed to an 'all at once' approach to a youth swimmer's development. For example, extensive developmental research in youth sport suggests the prominent role of parents as external sources of competence information for athletes in childhood, with stage-related progressions in an athlete's subjective value of coaches and peers during adolescence and young adulthood (Babkes & Weiss, 1999; Côté, 1999; Wylleman & Lavallee, 2004). However, the holistic question of 'which assets, when, and primarily shaped by whom?' remains pivotal and largely unexplored in sport [to the author's knowledge] from an empirical standpoint. The broad categories in this study may reflect the types of skills and behaviours that are necessary for swimmers to develop during the course of their athletic careers, however, the order in which these assets should be prioritised remains open to debate and further research.

In sum, developmentally-sensitive investigations into the perceived roles of coaches and parents (as well as their underlying belief systems) will serve to inform the utility of the current assets and will generate a richer awareness of the strategies that may be implemented to assist in specific asset formation. Beyond their direct behavior towards the athlete, the manner in which significant others shape and manage the behaviour of peers (i.e., teammates) to facilitate an adaptive peer climate for asset development is one such strategy that would appear to be theoretically critical for adolescents (Ullrich-French & Smith, 2006).

An important limitation of this study is the absence of youth swimmer perspectives on the proposed assets (Jones et al., 2011). The genesis of our method was largely driven by current literature which is based on models drawn from adult perceptions and notes the importance of adults creating a structured environment focused on development (e.g. Brunelle et al., 2007; Danish, Forneris, & 2005). Future studies should therefore consider swimmer perceptions, from quantitative and qualitative perspectives, to gain their overall appraisal of these psychosocial assets as relevant needs during adolescence and young adulthood (Jones et al., 2011).

Other limitations may include the overly academic nature of the majority of the expert panel in addition to availability bias due to the way in which the assets were presented to the experts. This may have led to them selecting particular assets over others or choosing to agree with what was already presented to them. However, we believe that the rigorous nature of the interviews, during which experts were encouraged to argue and disagree would have worked to overcome this issue. Finally, while we believe that the coaches in the panel of experts were representative of swimming coaches within the U.K., it is possible that they expressed overtly biased views in terms of elite swimming values and perspectives.

### **Conclusion**

Recent research has reported an increased coaching emphasis on personal development issues (Gucciardi, Gordon, Dimmock, & Mallett, 2009; Smith & Cushion, 2006) and, by taking a positive youth development perspective, this study offers greater clarity to a particular youth sport system (e.g., national governing body, coach, parent, swimming club) as to the psychological, social and emotional assets that can enable such personal development. When youth sport systems adopt the values associated with positive youth development, they challenge the youth sport experience to incorporate the holistic development of the athlete as a person that will remain intact regardless of whether the athlete attains a professional status. This legacy is one in which the young adult is able to successfully cope with the intensive demands of varying achievement settings, to navigate challenging career transitions and to manage interpersonal, organisational, and lifestyle factors more effectively (Bailey et al., 2009). We hope that this research encourages coaches, applied researchers, and practitioners in youth swimming settings to focus on the psychosocial needs of young people and to generate optimal developmental solutions.



# Chapter Four

Study Two: Coach attitudes towards and perceptions of positive youth development in swimming

In the previous study, an expert panel was recruited with the objective of establishing the key internal assets considered necessary for athlete development within a British swimming performance environment. The panel of experts comprised four coaches who provided balanced perspectives that were both positive with regard to the assets as a whole (in terms of accessibility and clarity), and also considerate of the genuine applicability and relevance of the assets. Whilst comments from these coaches were valued, it was considered important to gain a broader understanding of perceptions taken from the wider coaching population to fully assess the identified assets and their value. The purpose of such an exercise was deemed necessary to evaluate the extent to which cultural norms particular to British coaches may have influenced their practice and, in turn, may impact upon coach reaction to and acceptance of future positive youth development interventions within British swimming.

### **The Importance of the Coaching Role**

Research has established that coaches begin to play a more prominent role once athletes reach Côté's (1999) specialising years (described by Wylleman and Lavallee (2004) as the developmental phase), typically from around the age of 12 years. At this age, they are thought to become more responsive to expert information that will enhance their competence and they typically begin to recognise the coach as the expert in this area (Horn & Weiss, 1991). A more reciprocal relationship develops between the coach and athlete with the coach providing the informational support that was earlier provided by the parents (Côté et al., 2008). Prior to this, during the sampling (initiation) years, the coach's role is thought to be one of support and encouragement, with technical advice and positive instructional feedback being the dominant characteristics of interaction. Coach influence is believed to continue into the mastery stage, ensuring that coaches are often the most influential person in terms of the development of the elite athlete. Early research has concluded that the coach occupies a central position in asset development within the sporting environment with their values and philosophies towards sport directly impacting the young athlete's sporting experiences (Petlichkoff, 1993; Steelman, 1995). A coach's role in asset development is to use both direct and indirect strategies to provide opportunities through which the athlete can develop the asset (e.g., a goal setting exercise), to positively interact with the athlete acting as a positive role model, and to provide support, feedback, expectations and boundaries (Gould, Carson, & Blanton, 2013). The coach's effectiveness as an external asset will therefore be diminished if they do not value particular assets, because

they are not likely to provide these opportunities and to interact in these encouraging ways. Consequently, it is imperative that coaches understand and value the key internal assets for positive youth development in addition to recognising strategies that they can implement to assist in their growth.

Limited research has explored the degree to which coaches value the internal assets of development. However, recent research (e.g., Gould et al., 2006; Vella et al., 2011) has found that coaches do feel that they are important to develop. Nevertheless, it appears that whilst coaches indicated a desire to develop internal assets in young athletes, more recent findings suggest that the actual behaviours exhibited do not provide the opportunities to develop them (Gould et al., 2013). This disparity may be due to the level of perceived usefulness of the assets by coaches. It is possible that coaches feel that assets are important but not beneficial in helping achieve the overall aim of a successful (often defined as winning) performance. Therefore, coaches may feel that it is important for young people to develop these assets but, given an emphasis on swimming performance, they may not see their relevance. Hence, they may not prioritise the development of these assets over and above (or even alongside) physical skill development. It could also be that coaches do see these assets as being both important and relevant, but that they do not consider it a part of their role to develop them. Many coaches still appear to subscribe to the opinion that the mere participation in sport results in the development of these assets (e.g., McCallister et al., 2000). Although there is some evidence of experiential learning (Holt et al., 2008; Jones & Lavalley, 2009b), it would still seem that a more intentional approach to psychosocial development is appropriate for the development of internal assets. Furthermore, coaches may also believe that their role consists primarily of physical, technical and/or tactical skill development in youth swimmers, while psychosocial skill development should be the role of the parent; and this is an idea that is reinforced by the greater emphasis of these areas in traditional coach education (Abraham & Collins, 1998; Côté & Gilbert, 2009; Vella et al., 2011).

When one considers the dictionary definition of value, it has been defined as ‘the importance, worth or usefulness of something’ (2013), and one’s values are understood to be ‘standards of behaviour’ which echoes the fact that value might be comprised of concepts of importance and relevance in addition to a consideration of an individual’s perception of their role. This behavioural element means that value is more than just thinking about doing something. This facet involves a consideration of one’s

actions and an attentional focus on behaviour. Taken as a whole, therefore, one could argue that to accurately assess coach value towards internal assets, it is important to consider four separate but connected perceptions, namely, 1) the importance that coaches place on these assets for personal development, 2) the perceived relevance of these assets to swimming performance, 3) the extent to which coaches consider it to be part of their role to develop these assets and 4) how much attention they believe they currently give to developing these assets. Furthermore, it follows that we can only truly appreciate the influence of coaches with regard to their perceived and actual roles, as well as their perceptions and behaviours, when we consider who they are and from where their professional experience stems.

### **Coach Characteristics and Professional Status**

Recent research (Gould et al., 2013) has called for greater clarity related to the extent that particular coach attributes influence the value placed on developmental assets. For example, it has been reported that some youth sport coaches are not adequately prepared to structure the context to develop life skills (McCallister et al., 2000) possibly due to their route into coaching and subsequent professional development (Trudel, Gilbert, & Werthner, 2010). Therefore, an understanding of the background and characteristics of coaches who value these assets may highlight a preferential career, educational and/or experiential pathway. For example, Lacroix et al. (2008) reported that many of those involved in coaching in youth sports are often parents of participants who began by helping out and have subsequently become an integral part of the coaching and support team. Given the size and importance of the support provided through this route, it would be helpful to understand if those who are involved in a volunteer capacity, such as parent coaches, value these assets to a greater or lesser extent than those who have *chosen* to pursue a career in coaching and are therefore more likely to be full-time, paid coaches. Finally, given the emphasis of the development of these assets within youth sport settings, it is also considered important to understand if the age group that the coach works with has a bearing on the values that the coaches place on these assets. For example, Côté et al. (2010) propose a series of coach-led strategies for development of the 4Cs that differ according to the developmental trajectory of the athletes they are coaching. In a similar manner, coaches may place differing degrees of value on particular assets depending on the predominant age of the athletes they coach.

## **Purpose of the study**

Considering these points, the objective of the current study was to survey British swimming coaches to ascertain their perceptions and attitudes towards the 17 psychosocial assets developed within the first study by Johnston, Harwood and Minniti (2013). In addition to developing a general overview of perceptions and attitudes in regards to these assets, it is hoped to generate a clearer understanding of the characteristics of a coach who values these assets to a greater or lesser extent.

## **Method**

### **Participants and procedures**

Participants were 181 British swimming coaches (123 males, 58 females; *M* age = 40.29 years, *SD* = 11.54, range = 18-66 years) currently engaged in coaching practices. Coaches reported an average of 11.18 (*SD* = 8.65) years of coaching experience, and spent 13.01 (*SD* = 9.02) hours per week coaching. Just over half of coaches surveyed (56.9%; *n* = 103) did not consider swim coaching to be their main occupation and slightly more than this (59.1%; *n* = 107) indicated that they received remuneration for the swim coaching services that they provided. Furthermore, almost half of the study participants (48.6%; *n* = 88) coached age group swimmers (aged 13 years and under) with an additional 39.2% (*n* = 71) working with youth swimmers (aged between 14 and 16 years if female and 14 and 18 years if male). The remaining 12.2% (*n* = 22) coached senior swimmers (aged 17 years and over if female and 19 years and over if male).

Following approval from a University Ethical Advisory Committee, coaches were recruited via a variety of means including the ASA's website, the British Swimming Coaches Association, individual swim club websites, and personal coach contacts. Prospective participants were provided with detailed information that fully explained the purpose and procedures of the research (please see Appendix 4), and were made aware that their involvement was anonymous and voluntary. Coaches who consented to participate in the study completed a multi-section questionnaire that took approximately 25 minutes to complete. Both online (using SurveyMonkey Inc.™) and paper copies of the questionnaire were made available to coaches and both options were utilised.

### **Measure: Psychology for swimming questionnaire**

Due to the large scale nature of the study, a quantitative survey was developed with respect to the 17 psychosocial assets identified within the previous study (please



see Appendix 5). Coaches were first asked to complete a short section providing descriptive information such as age and gender, as well as their job status (i.e., whether swim coaching was their main job) and salary details (i.e., whether they received remuneration for coaching). They were also asked to indicate their number of years of coaching experience and the number of hours per week they spent coaching swimming. Finally, coaches were asked to select whether they primarily coached age group (13 years and under), youth (females 14-16/males 14-18 years) or senior (females over 16/males over 18 years of age) swimmers. Coaches were provided with a list of the 17 psychosocial assets and their definition and they were asked to consider these in relation to four fundamental questions. Coaches were asked to rate the degree to which they considered each of the assets (1) important for the personal development of the athletes, (2) relevant to successful swimming performance, (3) a part of their role as a coach to develop each asset and (4) the amount of attention that they currently gave to the development of each asset through both structured and unstructured activities. These four items, collectively, were used to represent a measure of the total value placed on each asset by the respondent (referred to as TAV for analysis purposes). Responses were noted on a Likert scale ranging from 1 (*not at all*) to 5 (*very much so*). Coaches were also asked a small series of additional questions. First, they were asked to provide a breakdown, in percentage values, of their current coaching role in regard to time spent developing each of five key areas, namely, technical, tactical/strategic, physical fitness, psychological and nutrition. Coaches were also asked if the breakdown was representative of what they believed their role should look like and to provide a similar breakdown of their ideal perceived coaching role if they felt that it did not.

## **Results**

### **Descriptive Statistics and Preliminary Analyses**

The means, standard deviations and Cronbach's alpha coefficients were calculated for each asset and subscale and are presented in Table 4.1. All asset groups demonstrated good internal reliability ( $\alpha > .70$ ). Coaches reported levels above the midpoint for all 17 assets across each of the four value areas, although notable differences across the 5 asset groups and 4 value areas did emerge. The data were analysed in several ways to assess between and within asset differences (a series of repeated measures ANOVAs); to test the proposed five-factor model (confirmatory factor analysis and post hoc tests where appropriate); and to examine differences related

Variable	Importance		Relevance		Part of Role		Amount of Attention		Total Asset Value (TAV)		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	$\alpha$
<b>SELF PERCEPTIONS</b>	<b>4.45</b>	<b>.47</b>	<b>4.48</b>	<b>.50</b>	<b>4.42</b>	<b>.54</b>	<b>3.59</b>	<b>.73</b>	<b>4.23</b>	<b>.43</b>	<b>.80</b>
Perceived sport competence	4.24	0.83	4.67	0.56	4.61	0.57	3.88	0.80	4.35	.49	
Self esteem	4.71	0.49	4.48	0.62	4.43	0.67	3.66	0.88	4.32	.47	
Clear and positive identity	4.39	0.66	4.29	0.77	4.21	0.82	3.22	0.97	4.03	.58	
<b>BEHAVIOURAL SKILLS</b>	<b>4.29</b>	<b>.55</b>	<b>4.50</b>	<b>.48</b>	<b>4.47</b>	<b>.57</b>	<b>3.70</b>	<b>.78</b>	<b>4.24</b>	<b>.43</b>	<b>.78</b>
Organisation	4.34	0.70	4.50	0.62	4.46	0.72	3.68	0.87	4.24	.50	
Discipline	4.36	0.67	4.61	0.55	4.45	0.67	3.85	1.00	4.32	.52	
Self-appraisal	4.18	0.68	4.38	0.68	4.49	0.68	3.58	0.97	4.15	.52	
<b>SOCIAL SKILLS</b>	<b>4.09</b>	<b>.61</b>	<b>3.91</b>	<b>.72</b>	<b>4.28</b>	<b>.72</b>	<b>3.37</b>	<b>.81</b>	<b>3.92</b>	<b>.57</b>	<b>.87</b>
Communication	4.44	0.62	4.33	0.69	4.51	0.71	3.68	0.96	4.24	.53	
Conflict resolution	3.94	0.78	3.62	0.94	4.03	0.93	2.92	1.03	3.63	.72	
Cooperation	4.13	0.77	3.94	0.91	4.30	0.80	3.48	0.97	3.96	.66	
Leadership	3.87	0.94	3.76	1.03	4.29	0.97	3.41	1.10	3.83	.78	
<b>APPROACH CHARACTERISTICS</b>	<b>4.46</b>	<b>.44</b>	<b>4.57</b>	<b>.39</b>	<b>4.55</b>	<b>.48</b>	<b>3.98</b>	<b>.67</b>	<b>4.39</b>	<b>.38</b>	<b>.78</b>
Character	4.54	0.61	4.29	0.81	4.48	0.70	3.79	0.93	4.27	.54	
Positive attitude	4.33	0.70	4.53	0.62	4.54	0.64	4.05	0.85	4.36	.50	
Motivation	4.45	0.66	4.78	0.45	4.69	0.57	4.20	0.81	4.53	.42	
Resilience	4.52	0.60	4.67	0.51	4.51	0.61	3.86	0.88	4.39	.48	
<b>EMOTIONAL COMPETENCE</b>	<b>4.02</b>	<b>.63</b>	<b>3.85</b>	<b>.69</b>	<b>4.12</b>	<b>.72</b>	<b>3.18</b>	<b>.87</b>	<b>3.79</b>	<b>.57</b>	<b>.84</b>
Empathy	3.80	0.82	3.47	0.95	3.96	0.93	3.03	1.00	3.56	.71	
Emotional self-regulation	4.27	0.71	4.41	0.67	4.40	0.71	3.37	0.97	4.11	.57	
Connection	3.98	0.81	3.67	0.97	4.00	0.88	3.13	1.03	3.70	.69	

**Table 4.1. Means and standard deviations and alpha coefficients for all assets and asset groups**

to Total Asset Value (TAV) scores (MANOVAs and follow-up ANOVAs and post hoc tests where appropriate). Effect sizes were also reported for both the repeated measure ANOVAs and the MANOVAs. Kirk's (1996) criteria was used to aid the interpretation of results where a value less than 0.01 was considered small; 0.06 was considered moderate; and a value of 0.14 was considered large.

**Most and least valued assets.** Preliminary analysis was conducted to offer an overview of the most and least valued assets perceived by coaches. This required a vertical analysis of Table 4.1 using repeated measure ANOVAs with Greenhouse-Geisser corrections to ascertain the highest and lowest scores within each value category of importance, relevance, role and attention. In brief, the levels of importance ( $F(11.44, 2058.32) = 31.72, p < .001, \omega^2 = .15$ ); relevance ( $F(7.43, 1336.47) = 76.59, p < .001, \omega^2 = .30$ ); role ( $F(9.42, 1695.20) = 25.27, p < .001, \omega^2 = .12$ ); and attention ( $F(11.14, 2004.74) = 43.52, p < .001, \omega^2 = .20$ ) were all significantly different with respect to the assets considered, with moderate to large effect sizes. Post hoc tests using the Bonferroni correction revealed that motivation was regarded as significantly ( $p < .05$ ) more relevant, more a part of a coach's role to develop and received more attention than most other assets whilst self-esteem was regarded as significantly ( $p < .05$ ) most important for life outside of swimming than most other assets. At the opposite end of the scale, empathy was significantly ( $p < .05$ ) less valued both for personal development and in regards to relevance for swimming, and was also considered significantly ( $p < .05$ ) less a part of a coach's role to develop than most other assets. Conflict resolution emerged as the least attended to asset in the group. When considering Total Asset Value (TAV), which involved taking an average of the four dimensions (the final column within Table 1), results revealed significant large differences between the levels reported for each asset ( $F(8.28, 1490.87) = 82.30, p < .001, \omega^2 = .31$ ). Post hoc tests using the Bonferroni correction revealed that motivation was valued to a significantly ( $p < .001$ ) greater degree than all other assets while, at the other end of the scale, empathy was valued to a significantly ( $p < .05$ ) lesser degree than most other assets.

**Value dimension differences within assets.** In order to explore the degree to which coaches perceived assets in different ways with respect to the four dimensions, a series of repeated measure ANOVAs with Greenhouse-Geisser corrections were once again conducted, this time across the horizontal axis of Table 4.1. Most notable results revealed significant large differences between the four value areas for self-esteem ( $F(2.42, 436.36) = 120.47, p < .001, \omega^2 = .40$ ) and clear and positive identity ( $F(2.62,$

470.98) = 122.91,  $p < .001$ ,  $\omega^2 = .41$ ). Post hoc tests using the Bonferroni correction for both these assets revealed that coaches placed significantly ( $p < .001$ ) greater importance on both self-esteem and clear and positive identity than they considered it to be a part of their role to develop these assets. Significant large differences between the four value areas of discipline ( $F(2.50, 449.40) = 52.78$ ,  $p < .001$ ,  $\omega^2 = .23$ ) and resilience ( $F(2.42, 435.82) = 83.64$ ,  $p < .001$ ,  $\omega^2 = .32$ ) were also revealed and post hoc tests using the Bonferroni correction for these assets found that coaches also placed significantly ( $p < .05$ ) greater relevance on both discipline and resilience than they perceived it a part of their role to develop these assets. Significant within-subject effects were found for all assets, and examination of the post hoc tests for each asset revealed that coaches placed significantly ( $p < .001$ ) greater value on these assets in terms of importance, relevance and role than the amount of attention they gave to developing them.

**The five factor model.** In order to look at the five groupings of assets as a collective, based upon the framework formulated in Study One, a confirmatory factor analysis (CFA) using the robust maximum likelihood method with EQS software (version 6.1; Bentler, 2003) was conducted to statistically test the five factor model proposed in the previous study. A number of goodness of fit indices were collectively used to determine the factor structure of the scale including the Standardized Root Mean square Residual (SRMR), the Comparative Fit Index (CFI), and the Root Mean Square Error of Approximation (RMSEA) (Hu & Bentler, 1999; Marsh 2007). Excellent fit is thought to be indicated with CFI scores of 0.95 and above, in addition to values of RMSEA and SRMR less than 0.06 (Hu & Bentler, 1999); while CFI scores that are equal to or above 0.90 as well as RMSEA and SRMR with values less than 0.08 are considered to indicate acceptable model fit (Hu & Bentler, 1999). The five factor asset model developed in the first study was tested and supported in this study: Satorra-Bentler  $\chi^2(109) = 229.17$ ,  $p < .001$ ; CFI = .91; SRMR = .08; RMSEA = .08 (90% Confidence Interval [CI] = .06-.09). Therefore, further analysis was conducted by taking a more detailed analysis of differences within and between asset groups.

**Perceived value of internal asset groupings.** When considering the five factor model, the degree to which coaches perceived each of the five groups was examined once again with the use of repeated measure ANOVAs. Emotional competence emerged as the least valued across each of the areas of importance, relevance, role and attention, followed by social skills. Repeated measure ANOVAs with Greenhouse-

Geisser corrections determined that the levels of importance ( $F(3.67, 659.77) = 46.70, p < .001, \omega^2 = .21$ ); relevance ( $F(2.80, 504.03) = 122.23, p < .001, \omega^2 = .40$ ); role ( $F(3.21, 577.40) = 33.00, p < .001, \omega^2 = .16$ ); and attention ( $F(3.42, 615.70) = 63.68, p < .001, \omega^2 = .26$ ) were all significantly different with respect to the assets considered, with these differences once again large in size. Post hoc tests using the Bonferroni correction confirmed that emotional competence and social skills were considered to be significantly ( $p < .001$ ) less important and less relevant than self-perceptions, behavioural skills and approach characteristics. Post hoc tests also confirmed that emotional competence was considered to be significantly ( $p < .001$ ) less a part of a coach's role and received significantly less attention than all other groups of assets, including social skills. Coaches also indicated that approach characteristics received significantly ( $p < .001$ ) more attention than all other groups of assets, while both approach characteristics and self-perceptions were rated as being significantly ( $p < .05$ ) more important than the remaining groups of assets. Approach characteristics were also considered to be a significantly ( $p < .001$ ) greater part of a coach's role to develop than all other assets aside from behavioural skills which, although rated highly, did not significantly differ from the other asset groups. A repeated measures ANOVA with Greenhouse-Geisser corrections on the total asset value also determined a significant large difference between the asset groupings ( $F(3.01, 541.83) = 124.12, p < .001, \omega^2 = .41$ ). Post hoc tests with Bonferroni corrections once again confirmed that, overall, emotional competence was reported to be significantly ( $p < .001$ ) least valued while approach characteristics were valued to a significantly ( $p < .001$ ) greater degree than the other assets. Further repeated measures ANOVAs with Greenhouse-Geisser corrections revealed large significant differences between the levels of importance, relevance, role and attention within each asset grouping of self-perceptions ( $F(2.24, 403.92) = 185.47, p < .001, \omega^2 = .51$ ); behavioural skills ( $F(2.51, 452.08) = 101.37, p < .001, \omega^2 = .36$ ); social skills ( $F(2.72, 489.45) = 109.84, p < .001, \omega^2 = .38$ ); approach characteristics ( $F(2.32, 417.33) = 90.89, p < .001, \omega^2 = .34$ ); and emotional competence ( $F(2.72, 488.98) = 115.31, p < .001, \omega^2 = .39$ ). Specifically, post hoc tests using the Bonferroni correction revealed that coaches reported behavioural skills and approach characteristics as significantly ( $p < .05$ ) more relevant to swimming performance than important for personal development, while this was the opposite case for social skills and emotional competence, which were rated as significantly ( $p < .05$ ) more important to personal development than relevant to swimming performance. Further, for all asset groupings,

coaches reported significantly ( $p < .001$ ) greater levels of importance, relevance and role than the amount of attention they currently allocated to developing the assets.

### **Coach characteristics and professional status**

In order to make the data more parsimonious, remaining analyses were conducted using only total asset value (TAV) scores (the final column within Table 4.1). Neither coach age nor coach gender had any significant bearing on the total asset value attached to each group of assets. However, the analyses did reveal a number of other characteristics that did influence reported value levels.

**Job status.** A one-way multivariate analysis of variance (MANOVA) was conducted to determine the effect of job status on the value placed on the assets. Coaches who classified coaching as their main occupation and were paid to coach swimming (full-time, paid) were compared with those for whom coaching was not their main occupation yet were still paid for it (part-time, paid coaches), and with those for whom coaching was not their main occupation and were unpaid for the time they spent coaching (part-time, unpaid). Using Pillai's trace, there was a significant moderate effect of job status on the value placed on the assets,  $V = .11$ ,  $F(10, 336) = 2.00$ ,  $p < .05$ ,  $\omega^2 = .06$ . Separate univariate ANOVAs on the five asset groups revealed significant moderate differences for self-perceptions ( $F(1,171) = 4.19$ ,  $p < .05$ ,  $\omega^2 = .05$ ); behavioural skills ( $F(1,171) = 7.29$ ,  $p < .01$ ,  $\omega^2 = .08$ ); and approach characteristics ( $F(1,171) = 5.65$ ,  $p < .01$ ,  $\omega^2 = .06$ ). Bonferroni post hoc tests revealed that, for each of the aforementioned asset groups, full-time, paid coaches valued these assets to a significantly ( $p < .05$ ) greater degree than part-time, unpaid coaches, though no significant difference emerged with part-time, paid coaches.

**Time allocated to psychological skill development.** Table 4.2 presents the five key areas that coaches were asked to provide a breakdown, in percentage values, in regard to time spent developing, namely, technical, tactical/strategic, physical fitness, psychological and nutrition, and the respective mean percentage time values categorised by occupational status (i.e., full-time, paid, part-time, paid and part-time unpaid) as reported by the coaches. Two separate one-way ANOVAs were conducted to compare the three occupationally different groups on the time they reported that they *actually* allocated to psychological skill development and in regards to the time that they would *ideally* allocate to psychological skill development. There was a significant small effect

Area of Development	Full Time Paid						Part Time Paid						Part Time Unpaid					
	Actual % Time			Ideal % Time			Actual % Time			Ideal % Time			Actual % Time			Ideal % Time		
	<i>M</i>	<i>SD</i>	<i>Range</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	<i>M</i>	<i>SD</i>	<i>Range</i>
<b>Technical</b>	29.13	13.32	5-79	26.99	11.46	5-70	39.17	17.99	5-80	36.25	15.78	10-80	46.19	18.98	15-90	41.45	19.60	15-90
<b>Tactical/Strategic</b>	13.34	7.01	2-30	14.37	6.98	2-30	9.53	5.70	0-25	12.06	4.87	5-25	8.87	6.65	0-30	11.67	6.52	1-35
<b>Physical Fitness</b>	42.17	13.95	10-74	37.73	13.91	13-70	38.58	18.14	5-70	32.72	15.59	5-65	34.76	18.17	5-70	31.62	14.89	5-62
<b>Psychological</b>	9.50	6.46	0-30	13.23	6.24	2.5-30	7.75	6.78	0-40	11.51	6.41	5-40	6.27	5.71	0-30	11.15	6.30	1-30
<b>Nutrition</b>	6.01	3.65	0-20	8.01	4.98	1-20	4.97	4.21	0-20	8.29	4.35	2-20	3.91	3.90	0-15	7.02	3.99	1-20

**Table 4.2. Statistics showing time coaches of differing occupational status allocate to different skill development areas.**

of job status on the actual time allocated to psychological skill development ( $F(2, 171) = 4.62, p < .05, \omega^2 = .05$ ), but no significant effect was found in regard to the ideal time. Bonferroni post hoc tests revealed that full-time, paid coaches allocated significantly more time to psychological skill development than part-time, unpaid coaches.

**Age group coached.** A one-way MANOVA was performed to determine the effect of age group coached on the value placed on the assets. Differences between three predetermined age groups were investigated: 1) age group (aged 13 years and under); 2) youth (aged between 14 and 16 years if female and 14 and 18 years if male); and 3) senior (17 years and older if female and 19 years and older if male). Using Pillai's trace, there was a significant moderate effect of age group coached on the value placed on the assets,  $V = .12, F(10, 350) = 2.13, p < .05, \omega^2 = .06$ . Separate univariate ANOVAs on the five asset groups revealed significant moderate differences for self-perceptions ( $F(2,178) = 3.22, p < .05, \omega^2 = .04$ ), and behavioural skills ( $F(2,178) = 5.97, p < .05, \omega^2 = .06$ ). However, Bonferroni post hoc tests revealed significant between group differences for behavioural skills only, with those coaches who coached both youth and senior swimmers reporting significantly ( $p < .05$ ) greater value on this group of assets than those who coached age group swimmers.

## Discussion

Researchers and applied practitioners continually extol the virtues of positive youth development in young people and the merits of using sport as a context within which to promote this (Côté et al., 2010; Fredricks & Eccles, 2004; Gould & Carson, 2008). However, much less research has attempted to understand how the gatekeepers and creators of those environments feel about the internal assets related to this, and their understanding of the role that research expects them to play within this developmental arena. Recent research by MacNamara and colleagues (2010a, 2010b) has developed our understanding of how we should view psychosocial development within the realms of talent development and the mechanisms through which this development may occur, citing coach support and involvement as key factors in psychosocial development. However, we know very little about the coaches who currently operate within the UK youth sport system and, specifically, those working within swimming. As a result, we cannot assume that our coaches currently possess the necessary attributes to support psychosocial development within sport. Therefore, this study aimed to develop a greater understanding of British swimming coaches' perceptions of and attitudes towards positive youth development, and to determine whether individual differences in



professional coaching characteristics were associated with the value attached to positive youth development through swimming.

The current study generated an in-depth and extensive assessment of coach attitudes towards the 17 internal assets developed within the previous study. The study also investigated and confirmed the existence of the five factor higher order model, also proposed in the previous study. In addressing the first objective of the current study, it was determined that coaches did indeed value certain groups of assets over and above others. Specifically, these were intrapersonal assets that appeared to be more relevant to swimming and included those assets in the approach characteristics and self-perceptions groups (e.g., motivation, self-esteem, perceived sport competence, resilience and positive attitude), while the interpersonal assets in the social skills and emotional competence groups (e.g., empathy, conflict resolution and connection) were valued least. These findings provide further insights into the discussions from the previous study (Johnston et al., 2013) in which some participants stated that they could not see the relevance of these social and emotional assets for swimming, given the individual nature of the sport. Indeed, the present study found that coaches rated both emotional competence and social skills assets as being significantly more important to personal development than relevant to swimming and performance. Meanwhile behavioural skills and approach characteristics comprised assets that were viewed as being significantly more relevant to swimming than important for overall personal development. The results of this study, therefore, appear to contradict those of previous studies in which social skills and the assets contained within this group (e.g., communication and leadership) have previously been cited by coaches as assets of primary developmental importance (Gould et al., 2006; Holt et al., 2008; Jones & Lavallee, 2009a; Strachan et al., 2011). Whilst it may be difficult to determine the applicability of these assets for youth swimmers, we may be more able to understand how a senior athlete might utilise these assets and, indeed, might be expected to demonstrate competency in these areas to enable personal responsibility and ownership of performances, an area highlighted as important to develop by Gould and colleagues.

Positive youth development has been defined as “the acquisition of all the knowledge, skills, competencies and experiences required to successfully transition from adolescence to adulthood” (Schulman & Davies, 2007, p.4); therefore, the question is not necessarily whether the asset is relevant and applicable to youth swimmers but, rather, if it is a necessary attribute to possess as a senior level swimmer.

For example, within the swimming environment, the communication asset enables athletes to be effective in receiving feedback from coaches and to listen to instructions within a training session. It also enables the athlete to provide feedback to the coach in terms of how they felt during and after the session, and to inform the coach about their perception of the level of difficulty of the session. Further, the ability to resolve conflict enables the athlete to find common ground with other individuals who are in their training environment if conflicts arise, including coaches, parents, teammates and support staff and to ensure that effective working relationships can be developed and maintained. Indeed, the ability to deal more effectively with parental over-involvement was reported as a key developmental asset in previous research (Gould et al., 2006; Gould et al., 2009). Moreover, research by Côté and colleagues (e.g., Côté et al, 2010; Côté & Hay, 2002) promotes the development of a more collaborative relationship between coach and athlete as the athlete matures and the development of assets within the social skills group would ostensibly assist with this process. Côté et al. (2010) outlined coach-led strategies for the development of the 4Cs for coaches of performance-focused adolescents. They suggested that social development should be encouraged through travel and participation in appropriate competitions and that coaches should model appropriate leadership and self-regulatory responses to encourage sportsmanship and empathy which, in turn, would develop character and connection. They further suggest organising social events, promoting team colours and/or kit, athlete mentor programs and engagement with local schools and communities to encourage the promotion of connection and character, underlining the importance of developing these assets in performance-focused athletes. With these examples in mind, the results presented here support the call of Fraser-Thomas and Côté (2009) for better coach education on social and emotional development and the development of greater awareness, as to the applicability and relevance of these assets within a performance swimming environment.

### **Intention versus Attention**

Results from the current study revealed significant differences between the three value dimensions of importance, relevance and role and the attentional dimension across all assets. This finding supports previous research in which coaches expressed good intentions about the development of life skills in their athletes, yet created no real opportunities for them to develop these skills (Gould et al., 2013; McCallister et al., 2000). However, whilst the value scores for the internal assets reported in this study are

high, coaches reported a particularly low level of overall value of psychological skill development as measured by the time allocated to this developmental area. Furthermore, some coaches currently report allocating no time to psychological skill development, indicating a low to non-existent level of value placed on this area as a whole. This confirms that technical skill development and the development of physical fitness are consistently prioritised above psychological skill development.

### **Individual differences in coaches**

**Part-time volunteers vs. full-time professionals.** In addressing the study's second objective, the attempt to understand if particular coach characteristics affected coach reported levels of asset value, we found that full-time, paid coaches (professional) appeared to place a greater value on the more swim specific assets found in self-perceptions, behavioural skills and approach characteristics than part-time, unpaid coaches (volunteer). This difference in asset value is perhaps unsurprising given the youth sport system's reliance on parents and others who are involved in the sporting environment. For example, Lacroix and colleagues (2008) found that many coaches were actually parents and senior student-athletes who had been recruited due to a shortage of trained coaches. Wiersma and Sherman (2005) found critical barriers within the knowledge transfer process involving volunteers, including issues relating to the quality of education provided and the level of commitment volunteers are expected to make to an education program, suggesting educational differences may exist between professional and volunteer coaches. However, Wiersma and Sherman also noted the strain that multiple commitments placed on volunteers who often had family and work demands to manage in addition to the coaching demands, which resulted in time becoming a highly sought after commodity. Indeed, within the current study, time does appear to be a limiting factor for volunteers, with significant differences between the actual time allocated to psychological skill development by professional and volunteer coaches, despite the lack of differences between coaches regarding the amount of time they considered ideal for this purpose. In stating that, whilst not statistically significant, volunteer coaches allocated a lower percentage of their time to psychological skill development (on average) in regard to their perceptions of what an ideal coaching role should reflect, compared to professional coaches (11.15% versus 13.23% respectively). This finding suggests that, if all things were equal from a time perspective, professional coaches would still spend just over 2% more of their time on psychological skill development than volunteer coaches, indicating that psychosocial development is

located further down the list of coaching priorities for part-time coaches as opposed to full-time.

**Coach contribution to asset development during differing developmental periods.** A final finding of this study was that coaches of youth and senior athletes appeared to value the assets in the behavioural skills group significantly more than those who coach age group swimmers. If we take a closer look at the specific assets within this group (organisation, discipline and self-appraisal), these are assets that are arguably of more increasing relevance and importance to swimmers as they age within the sport. Whilst the 17 assets have been presented in the first study as a collection of assets that all appear equally important for positive youth development in swimming, it remains appropriate to consider the development of these assets in a staged and additive manner, as opposed to an ‘all at once’ approach (Benson et al., 1998; Scales et al., 2000). Although there is limited developmental research in sport to inform this process, it seems reasonable to speculate that significant others (i.e., coaches and parents) contribute most effectively to the growth of certain assets during differing developmental periods (see Wylleman & Lavallee, 2004). Indeed, the differential perceptions of age group coaches vis-à-vis the value placed on behavioural skills compared to coaches of older swimmers reflects potential stage-related differences in their psychosocial roles. Furthermore, particular assets may be more relevant at certain developmental stages, with those such as motivation, self-esteem and perceived sport competence arguably most relevant at the younger age groups with the developmental processes attached to these (i.e., task-oriented goal-setting and positive self-talk) underpinning the ongoing development of the other assets. Future research could adopt Wyllemaan and Lavallee’s (2004) model to assist in the progression of these ideas by introducing an additional layer outlining which assets are most relevant and require the most attention from parents and coaches at particular developmental stages.

### **Implications and Limitations**

The findings of this study show that coaches, in general, reported high levels of asset value, with intrapersonal assets, in particular, valued to a greater degree. Most significant however, were discrepancies between perceptions of importance and relevance compared to attention and behaviour toward the assets, which perhaps indicates the truer sense of value given the definition of value inferred as standards of behaviour. Based on these results, there are a few suggestions that we can provide to

coaches and national governing bodies of sport for the integration of positive youth development in British competitive swimming environments.

First, findings reinforce those of previous researchers (e.g., Gould et al., 2007; McCallister et al., 2000) who revealed discrepancies between coach intentions to develop internal assets and the actual time they allocate to this process. Differences appeared to be magnified for volunteer coaches who reported lower levels of value on the intrapersonal assets of self-perceptions, behavioural skill and approach characteristics, in addition to a lower allocation of time for both actual and ideal psychological skill development compared to professional coaches. However, this discrepancy in asset value levels may be abrogated with education and awareness, elements that could be addressed through appropriate coach education initiatives that highlight how these social and emotional assets can be relevant in a British swimming environment. While the provision of such sessions is the responsibility of the national governing bodies of sport, caution is advised regarding interactions with the volunteer population, as mandatory education sessions may discourage individuals from volunteering their services (Wiersma & Sherman, 2005). Therefore, volunteer coaches would benefit from short and affordable stand-alone workshops that are specifically targeted at helping coaches implement age and competition level specific coaching strategies within key coaching areas (e.g., psychological skill development). Workshops based on Côté et al.'s (2010) proposed coaching strategies for coaches of different developmental groups with the aim of developing the 4Cs could be an appropriate starting point for such interventions, with the development of similar workshops based on the additional assets within the current framework over time.

Such education also needs to address the current lack of transference between the intention (attitude towards the asset) and attention (behaviour towards the asset) of developing these assets, most likely by increasing the value placed on psychological skill development as a whole. However, courses could also provide coaches with simple but effective strategies that are easy to implement and integrate into their session plans to aid the development of the assets. Prior research in this area has highlighted both direct and indirect strategies for asset development (Gould et al., 2013), many of which do not require extra time to implement. Examples include developing meaningful relationships with the athletes and providing a good role model through awareness of the coach's own behaviours (Camiré et al., 2011; Gould et al., 2007; Gould et al., 2013). Furthermore, as suggested in the previous study, coaches could

intentionally plan to develop particular assets within predetermined sessions, and integrate teachable moments into session plans, an approach successfully modelled by Harwood (2008) and suggested by both Camiré et al. (2011) and Gould et al. (2013).

Applied implications must be considered in light of the limitations of the study. First, the present work relied upon a self-report survey to measure the value coaches placed on the assets, and coaches may have responded in a socially desirable manner regarding their perceptions of the 'appropriate' levels of importance, relevance and role. Coaches may also have struggled to accurately assess the amount of attention that they currently give to developing the assets in their coaching activities. Future research in this area should therefore include observations of coaching behaviours in their research design. Furthermore, considering that coaches are only one of the external assets involved in positive youth development, there is a need to understand the attitudes and perceptions of other significant external assets; e.g., parents or peers. Parents are considered to have a greater impact on an athlete's development in the formative, sampling years in sport (Côté, 1999). Given the developmental nature of this research and the focus on *youth*, it is considered vital to understand the effect of parents on the development of these assets. Additionally, given the current findings regarding discrepancies in asset value levels between professional and volunteer coaches and the assumption that many volunteers are also parents of the participants, a more in-depth understanding of parental attitudes towards these assets is necessary. In addition, increasing our understanding about and the provision of appropriate parental interventions may have the secondary benefit of engaging our volunteer population. Consequently, a progression of this study could also include an assessment of the potential mechanisms through which parents may specifically influence asset development, as a means to allow educational materials to be more appropriately designed and targeted.

In sum, findings of this study advance research in sport and developmental psychology by providing greater insight into coach perceptions of the internal assets related to positive youth development in swimming. In addition, findings suggested that full-time, paid coaches and part-time volunteer coaches have varying needs and thus, may require targeted, intentional approaches related to advancement of positive youth development with their respective athlete environments.



# Chapter Five

Study Three: Parental perceptions of parenting style, social support provision and psychosocial asset value in swimming.

The previous study sought to provide an understanding of the value that swimming coaches placed on the key internal assets of positive youth development. The objective was to advance our understanding of the degree to which coaches may be acting as external assets of positive youth development in swimming. Beyond coaches, however, parents are also known to play a considerable role in the development of their children through their own beliefs and behaviours (Babkes & Weiss, 1999; Brustad, 1993; Woolger & Power, 2000), and are thought to occupy a unique position as role models, interpreters and providers within sport (Fredricks & Eccles, 2004). These findings from parent-focused research suggest that parenting practices and behaviours will influence the development of these psychosocial assets within their child-athletes in addition to the child's own opinion of these assets. Indeed, Bloom (1985) highlighted the important role of parents in ensuring the development of the child to their full potential, explaining that parents must first value both achievement itself and the chosen talent area (e.g., sport). They must then work to develop those same values in their children, in an effort to create and maintain a long term commitment to learning in their child within the chosen talent area. Therefore, in a similar vein to appraising coaches, it is important to determine the degree to which parents value those assets that researchers and youth sport practitioners purport to be fundamental to the psychosocial development of athletes.

The way in which a parent interacts with their child and the opportunities that they provide for them will influence the degree to which they develop the internal assets. For example, parents are known to be responsible for introducing their children to sport and providing them with the opportunity to experience a range of activities (Côté, 1999; Côté et al., 2008). Research from the talent development domain tells us that, during the sampling years (ages 6 to 13) parents encourage their children to get involved in a wide range of enjoyable sporting activities and take a leadership role in valuing and providing these opportunities. Within the specializing years (ages 13 to 15) athletes make a commitment to one or two sports with parents making increased financial and time commitments to the child-athlete. While parents also develop a growing interest in their child-athlete's sport as committed followers and facilitators, they continue to emphasize the value of school as well as sport achievement. Finally, during the investment years (ages 15 to 18), athletes become committed to achieving an elite level in one sport, and parents' roles in terms of tangible and emotional support intensify as parents make greater sacrifices to ensure optimal training conditions and to



help their son or daughter deal with setbacks (Côté, 1999; Côté et al., 2008). Parents therefore behave in very specific ways to support the development of their child-athlete across a multitude of domains and provide differing forms of support to their child within specific domains to assist them through their developmental journey. A more formal and global approach to understanding the behaviours parents exhibit is to consider them as classified within particular parenting styles (Horn & Horn, 2007).

### **Parenting Styles and Practices**

The ways in which parents choose to interact with their child/ren and administer care, attention and discipline can be collectively classified within particular parenting styles. There has been much discourse over the key dimensions of parenting style but three core themes are generally accepted to exist; namely, warmth, structure and autonomy support (Skinner, Johnson, & Snyder, 2005).

Warmth has been defined as “the single most important and ubiquitous dimension of care-giving...often labelled acceptance, warmth refers to the expression of affection, love, appreciation, kindness and regard” (Skinner et al., 2005, p.185). Warmth is thought to be closely linked to the concept of involvement, which concerns the level to which a parent displays interest, knowledge and active participation in the child’s life, and is thought to reflect the level of parental dedication to the child (Grolnick & Ryan, 1989). Structure involves parents setting clear and consistent guidelines for children to operate within and being clear about their expectations and any rules they wish to impose. By providing clear boundaries in this way, children are free to make their own decisions within these limits and so are encouraged to act in self-determined ways (Grolnick & Ryan, 1989). Autonomy support involves parents giving their child/ren the opportunities to express themselves freely, and encouraging their child/ren to develop, accept, value and assert their own genuine preferences and opinions. Parents should therefore, “value and use techniques which encourage independent problem solving, choice, and participation in decisions” (Grolnick & Ryan, 1989, p.144). These three dimensions of parenting style (warmth, structure, and autonomy support) can be conceptualised with the framework of self-determination theory (SDT; Deci & Ryan, 1985; Ryan & Deci, 2000). Within this framework, individuals require three basic psychological needs: the need to belong (relatedness), the need to feel skilled (competent) and the need to feel able to behave freely (autonomous). Skinner and colleagues conceptualise these three basic psychological needs within a motivational model whereby each dimension of parenting style supports

the development of these psychological needs. The provision of warmth assists with the development of connection and, hence, is critical to children's experiences of belonging, thus fulfilling the need for relatedness. Structure provides the basis for events that will allow the child to experience competence while autonomy support helps the child feel able to make and assert their own decisions, thereby experiencing autonomy. A positive parenting style is considered one in which high levels of all three of these dimensions (warmth, structure and autonomy support) are present. However, Grolnick and Ryan (1989) conducted a qualitative study, assessing autonomy support, involvement and the provision of structure in a sample of 64 elementary school children in Grades 3-6 (8-11 years) and did not find support for the existence of the structural dimension. They attributed this to the children's understanding of control. Nevertheless, they did find support for the involvement dimension, as separate from that of autonomy-support; and in their follow up study (Grolnick, Ryan, & Deci, 1991) they utilised a quantitative measure, the Children's Perceptions of Parents Scale (CPOPS) to assess only the autonomy-support and involvement dimensions. Grolnick appears to have adopted and utilised these dimensions of parenting style in her work from this point onwards. High levels of involvement combined with high levels of autonomy support are considered most adaptive to development, however, when parents combine high levels of involvement with low levels of autonomy support children will begin to feel negatively about the level of involvement (Grolnick, 2003). The CPOPS was later developed by Robbins (1994) with the addition of the warmth subscale to form the College-Student version of the POPS for use with children older than 11 years and allowed assessment of this important element of parenting.

**Sport-based research.** Despite the recommendation from Horn and Horn (2007) that a more global perspective on parental influences in sport would be beneficial, progress within this area has been slow and only a limited number of studies have been conducted in this area. Juntumaa, Keskivaara, and Punamäki (2005) adopted a more traditional classification of parenting style. Utilising Baumrind's (1971) typology, they successfully tested a model linking an authoritative parenting style (i.e., one that is high in both involvement and control) with high levels of mastery orientation and low levels of deviant behaviours, such as rule breaking and non-task related behaviour. These results were discussed in relation to the positive effects of an authoritative parenting style incorporating elements of warmth, support and involvement on the development of adaptive achievement strategies which allowed the

players to develop strategies of self-reliance and adaptive attribution. However, support for the existence of Grolnick's adaptation of parenting styles in sport was later provided by Holt, Tamminen, Black, Mandigo and Fox (2009). In an extensive qualitative study of soccer players and their parents, the researchers first observed and then interviewed 56 parents of soccer players, and 34 of their female children ( $M$  age = 13 years;  $SD$  = 1.2 years). Data analysis was guided by Grolnick's (2003) theory of parenting styles and supplemented by material garnered from the observational period. The study produced a number of key findings. First, just over half the sample (32 parents from 18 families) reported examples of an autonomy-supportive style, characterised with high levels of involvement and appropriate structure provided in the form of rules and boundaries within which the child was allowed and encouraged to make their own decisions. Just under a third of participants (13 parents from seven families) were classified as displaying a controlling parenting style, represented by high levels of involvement with low levels of autonomy support with parents enforcing extra practice drills at home, preventing children from going out to socialise and removing the bedroom door as a punishment for disobeying rules. A key distinction between these two groups of parents was the presence of control within behaviours exhibited by the controlling group as opposed to structure displayed by the autonomy supportive group. Finally, a third group (11 parents from seven families) displayed a mixed parenting style, in which they exhibited elements of both autonomy support and control. Inconsistencies within the individual parent as to the behaviours they displayed (e.g., sometimes controlling and sometimes autonomy supportive) in addition to the inconsistencies between parents (e.g., differing styles from mother and father) characterised this group. A further finding of the study was a reciprocal influence from children to parents whereby parents relaxed the boundaries somewhat and provided greater autonomy support once the child demonstrated an element of maturity and personal responsibility for their actions. This study therefore provides a comprehensive, in-depth, yet preliminary assessment of parenting styles within sport, in particular Grolnick's (2003) typology of autonomy-support and involvement.

Whilst this study was comprehensive, clearly more research is required to determine the prevalence of particular parenting styles across differing developmental domains (e.g., different sports, age ranges, and competitive levels). Further, the dimensions that were proposed by Grolnick allow links to be made between behaviours likely to be displayed by parents and the external assets required for positive youth

development (Benson et al., 1998). Excluding the ‘constructive use of time’ asset which has been shown to be unreliable within sporting samples (e.g., Strachan et al., 2009), the external assets of empowerment and boundaries and expectations are proposed to be provided via parenting styles characterised by high levels of autonomy supportive behaviour and a high degree of involvement. Furthermore, a parenting style characterised by a high degree of warmth is also likely to fulfil an element of the provision of support, as defined by the provision of high levels of love and support (Benson et al., 1998). Moreover, the importance of supportive interactions has been widely maintained throughout the literature (e.g., Camiré et al., 2009a; Gould et al., 2013; Strachan et al., 2011), suggesting that the importance of each of the external assets is not evenly distributed across the three areas and that the support asset assumes a larger degree of developmental impact. This would seem logical given that parenting styles are considered a more global concept influencing the general emotional climate that the child operates within, while specific behaviours within particular domains are considered to be more attuned to the requirements of the particular context. These domain specific behaviours are thought to be exhibited through the provision of social support, an area which merits particular attention.

### **Social Support**

Social support is a multi-dimensional construct, and sport-based research suggests four different components (Rees & Hardy, 2000). *Tangible support* is support that can be easily observed such as financial support and the travel and transport services to and from training and competition that parents provide. *Esteem support* occurs when a parent tries to increase a child’s self-confidence and self-esteem through supportive statements, while *emotional support* refers more to the provision of comfort and security resulting in the individual feeling cared for and loved. Finally, *informational support* involves the provision of advice or guidance, often involving technical and operational comments (Rees, 2007). Social support can be further conceptualised in one of two ways. The first refers to the actual support that is *received* while the second involves an appraisal of the amount and quality of support available (*perceived* available support). Perceived available support is further segregated into general and interpersonal dimensions, of which the interpersonal dimension is of interest in the current study, as this involves perceptions that are specific to individual relationships with specific people such as parents. Perceived support is more consistently related to positive health outcomes than actual received support and, in

sport, has been associated with beneficial effects on self-confidence (Rees & Freeman, 2007), and sport performance (Freeman & Rees, 2009). As previously noted within this chapter, qualitative research in positive youth development, youth sport and talent development has repeatedly reported the critical role that parents play in providing different elements of social support throughout their child-athlete's sporting career (e.g., Camiré et al., 2009a; Gould et al., 2013; Strachan et al., 2011). We also know that parental roles change as the athlete grows and matures and develops more supportive relationships with others in their environment, such as the coach and their peers (Camiré et al., 2009a). For example, during the sampling years parents need to provide adequate levels of informational and tangible support in conjunction with emotional support to provide their children with the opportunities to participate in a variety of sports and to feel secure to state preferences to one another (Côté, 1999; Côté et al., 2008). As the child moves into adolescence, the parental role changes depending on the direction or choice of developmental trajectory for their child (Côté, Young, Duffy, & North, 2007). Those who move into the recreational years experience a similar relationship with their parents as was experienced during the sampling years, while those who move into the specialising and investment years experience a gradual decrease in parental involvement as they mature and become more independent. As a function of this, the role of the parent changes to facilitate this growing independence, yet they are still required to provide tangible support in the form of financial support, along with emotional support to protect their child from the ups and downs of athletic life (Bloom, 1985).

Research has therefore been unequivocal in establishing the central role of parents in the provision of social support in its different forms. However, whilst this research has assisted in the detailed exploration of parental roles and support-related behaviour, researchers have yet to empirically establish any mechanistic links between the differing forms of social support and the nurturing or growth of internal psychosocial assets. Further, researchers have not considered the antecedents of social support and how, for example, general parenting style influences a parent's ability or decision to provide elements of social support in a specific achievement context (e.g., swimming).

### **The Current Study**

Given this discussion of the literature, two distinct purposes underpin the current study. Firstly, in a replication of the investigation into coaches, the study will assess the

existing level of parental value placed on the 17 psychosocial assets identified in this thesis. The five factor model of self-perceptions, behavioural skills, social skills, approach characteristics and emotional competence will also be tested to determine if these asset groupings possess structural integrity in the sport parent population. The current study will examine if differences exist in parental value between the five asset groups and within the four value areas of importance, relevance, role and attention.

Secondly, the constructs of parenting style and social support provision will be examined in order to determine their role as potential antecedents to these levels of parental asset value. The parenting style reported by parents serves as a global measure of parental style in this study. In contrast, the social support that a parent perceives that they offer to their child reflects domain or context specific manifestations of these parenting styles that may mediate the effect of parenting style on the asset value reported by parents. Although these relationships have not previously been explored, it was hypothesized that parenting style as measured by levels of involvement, autonomy support and warmth would positively predict the four dimensions of social support, namely, emotional support, esteem support, informational support and tangible support. In turn, each social support dimension was proposed to positively predict the total asset value attached to each of the five asset groupings of self-perceptions, behavioural skills, social skills, approach characteristics and emotional competence. Finally, the study examined the indirect relationships of parenting style on parental asset value via social support. In sum, the broad aim of this study was to explore in a cross-sectional manner whether parents who reported more positive parenting practices valued psychosocial assets in youth swimmers to a greater extent.

## **Method**

### **Participants and Procedures**

Participants were 249 parents (80 males, 158 females and 11 participants who did not declare their gender;  $M$  age = 46.78 years,  $SD$  = 5.53, range = 27-68 years) of current British swimmers of mixed ability (102 males and 147 females;  $M$  = 14.29 years,  $SD$  = 3.03, range = 7-27). Parents reported that their children spent an average of 12.72 ( $SD$  = 5.66) hours a week training and competed at a variety of competitive levels including club ( $n$  = 57), county ( $n$  = 68), national age/youth ( $n$  = 69), national senior ( $n$  = 25), international junior ( $n$  = 14) and international senior ( $n$  = 16). Following approval from the University Ethical Advisory Committee, parents were recruited via a variety of means including the ASA's website, individual swim club websites, coach

contacts from the previous study and additional personal contacts. Prospective participants were provided with detailed information that fully explained the purpose and procedures of the research (please see Appendix 6) and were made aware that their involvement was anonymous and voluntary. Parents who consented to participate in the study subsequently completed a multi-section questionnaire that took approximately 25 minutes to complete. Both online (using SurveyMonkey Inc. <sup>TM</sup>) and paper copies of the questionnaire were made available to parents and both options were utilised (please see Appendix 7). The parent who was most involved in the swimming environment and interacted most with their child-swimmer was encouraged to complete the questionnaire. They were asked to think about their child who participated in swimming and, if they had more than one child-swimmer, they were asked to think first of the child who was over 12 years of age. If they had more than one child in this category, they were given free choice as to which child they wished to think about, but were asked to keep this child at the forefront of their mind when answering the questions and to accurately note this child's characteristics when prompted.

## **Measures**

**Psychology for swimming questionnaire.** The survey developed for use in the previous study was used in this study to measure the value of psychosocial assets reported by parents. Parents were first asked to complete a short section providing descriptive information on their chosen child and in regard to themselves. Questions related to the child included age, gender, time spent training per week and current level of participation. Questions related to themselves included age and gender. As with Study Two, parents were provided with a list of the 17 psychosocial assets and their definitions and asked to consider each in relation to four questions. Parents were asked to rate the degree to which they considered each of the assets (1) important for the personal development of their child, (2) relevant to successful swimming performance, (3) a part of their role to develop each asset and (4) the amount of attention that they currently gave to the development of each asset through both structured and unstructured activities. These four items, collectively, were proposed to measure the total value placed on each asset by the respondent. Responses were noted on a Likert scale ranging from 1 (*not at all*) to 5 (*very much so*).

**Parenting style.** Parental perceptions of their parenting style were assessed using the 21-item Perceptions of Parents Scale College-Student Version (POPS; Robbins, 1994) which was modified to reflect a parent's perspective. The scale was

designed to measure Grolnick's (2003) parenting styles model that has previously been described in this chapter and measured the three dimensions of autonomy support, involvement and warmth. Autonomy support was measured with nine items (e.g., "Whenever possible, I allow my child to choose what to do"), involvement was measured using six items (e.g., "I spend a lot of time with my child") and warmth was measured with six items (e.g., "I make my child feel very special"). Responses were noted on a Likert scale ranging from 1 (*not at all true*) to 7 (*very true*). The measure was designed as part of a doctoral dissertation by Robbins (1994) who provided preliminary evidence for the reliability and validity of this scale. Further reliability and validity evidence for the scale was provided more recently by Niemiec et al. (2006).

**Perceived social support.** Parental perceptions of their provision of social support was measured using the Perceived Available Support in Sport Questionnaire (PASS-Q; Freeman, Coffee, & Rees, 2011) adapted to reflect a parent's perspective. This 16-item measure employed the stem "To what extent are you someone..." and assessed emotional support using four items (e.g., "who provides your child with comfort and security"), esteem support using four items (e.g., "who reinforces the positives"), informational support using four items (e.g., "who gives your child tactical advice"), and tangible support using four items (e.g., "who helps with travel to training and competitions"). Participants were asked to rate their provision of each type of support on a five-point Likert scale where 1 was '*not at all*' and 5 was '*extremely*'. Freeman et al. (2011) provided initial evidence for the factorial validity and internal consistency of the measure. The factor structure was tested using confirmatory factor analysis (CFA) with maximum likelihood estimation using LISREL 8.3 (Jöreskog & Sörbom, 1996) and the four factor model was found to have reasonable fit: Satorra-Bentler  $\chi^2(98) = 143.97, p < .001$ ; CFI = .94; SRMR = .06; RMSEA = .05. Cronbach's alpha internal reliability coefficients for the four dimensions ranged from .68 to .87, composite reliabilities ranged from .69 to .87, and test-retest reliabilities ranged from .73 to .84. The correlations between the four factors ranged from moderate ( $r = .40, p < .05$ ) to high ( $r = .84, p < .05$ ).

## Results

### Preliminary Analyses

Confirmatory factor analysis (CFA) using the robust maximum likelihood method with EQS software (version 6.1; Bentler, 2003) was employed to determine the factor structure of the measures utilised in the study. Following suggestions by Hu and



Bentler (1999) and Marsh (2007), the Standardized Root Mean square Residual (SRMR), the Comparative Fit Index (CFI) and the Root Mean Square Error of Approximation (RMSEA) were employed to evaluate factor structure. According to Hu and Bentler (1999), CFI scores that are equal to or above 0.95 as well as RMSEA and SRMR with values less than 0.06 are considered excellent criteria for model fit. The less restrictive criteria of RMSEA and SRMR with values greater than 0.08 and CFI scores less than 0.90 generally indicate that the fit of the model to the data is less than satisfactory.

The POPS was found to have poor factor structure: Satorra-Bentler  $\chi^2(186) = 416.86, p < .001$ ; CFI = .72; SRMR = .09; RMSEA = .07 (CI = .06-.08). Examination of the standardised loadings and modification indices revealed the need to remove two items from the involvement subscale (item numbers 6 and 18), six items from the autonomy support subscale (item numbers 1, 2, 5, 14, 19, 21) and three items from the warmth subscale (4, 13, 20). This revised POPS showed excellent factor structure: Satorra-Bentler  $\chi^2(98) = 53.58, p < .01$ ; CFI = .95; SRMR = .05; RMSEA = .05 (CI = .03-.08). Variable reduction procedures such as this are justified because the original structure is retained but with only the best performing indicators (Hofmann, 1995).

The PASS-Q also required minor modifications: Satorra-Bentler  $\chi^2(109) = 237.10, p < .001$ ; CFI = .88; SRMR = .08; RMSEA = .08 (CI = .06-.09). Modification indices suggested the removal of two items from the tangible subscale, after which the scale showed acceptable factorial structure: Satorra-Bentler  $\chi^2(71) = 145.59, p < .001$ ; CFI = .93; SRMR = .06; RMSEA = .07 (CI = .05-.08).

The five factor asset model proposed in the first study and supported in the second study, was again tested in this investigation and showed acceptable factor structure: Satorra-Bentler  $\chi^2(109) = 157.44, p < .01$ ; CFI = .93; SRMR = .04; RMSEA = .04 (90% Confidence Interval [CI] = .03-.06).

### **Descriptive Statistics and Scale Reliabilities**

The means and standard deviations and were calculated for each asset and are presented in Table 5.1. Parents reported levels above the midpoint for all 17 assets across each of the four value areas, although notable differences across the 5 asset groups and 4 value areas did emerge. The means, standard deviations and Cronbach's alpha coefficients were also calculated for each subscale of the psychometrically validated questionnaires in addition to the five higher order factors within the assets. These are all presented in Table 5.2. Even after the significant modifications made to

**Table 5.1. Means and standard deviations all assets and asset groups**

Variable	Importance		Relevance		Role		Attention		Total Asset Value (TAV)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
<b>SELF PERCEPTIONS</b>	<b>4.42</b>	<b>.60</b>	<b>4.37</b>	<b>.66</b>	<b>4.37</b>	<b>.65</b>	<b>4.02</b>	<b>.78</b>	<b>4.29</b>	<b>.54</b>
Perceived Sport Competence	4.13	.95	4.50	.78	4.14	.93	3.86	1.01	4.16	.66
Self-Esteem	4.71	.57	4.46	.70	4.59	.76	4.19	.83	4.49	.55
Clear and Positive Identity	4.41	.81	4.14	.88	4.38	.83	4.00	.92	4.23	.68
<b>BEHAVIORAL SKILLS</b>	<b>4.37</b>	<b>.62</b>	<b>4.39</b>	<b>.71</b>	<b>4.18</b>	<b>.69</b>	<b>3.91</b>	<b>.79</b>	<b>4.21</b>	<b>.57</b>
Organization	4.57	.64	4.49	.77	4.37	.77	4.02	.88	4.36	.59
Discipline	4.25	.86	4.32	.86	4.21	.86	3.90	.94	4.17	.72
Self-Appraisal	4.28	.78	4.37	.82	3.96	.90	3.81	.91	4.11	.64
<b>SOCIAL SKILLS</b>	<b>4.37</b>	<b>.65</b>	<b>3.99</b>	<b>.77</b>	<b>4.29</b>	<b>.65</b>	<b>3.76</b>	<b>.85</b>	<b>4.11</b>	<b>.59</b>
Communication	4.47	.81	4.29	.80	4.36	.78	3.90	.98	4.25	.63
Conflict Resolution	4.28	.81	3.72	1.00	4.28	.84	3.69	1.02	3.99	.70
Cooperation	4.45	.75	3.99	.99	4.29	.80	3.75	.93	4.12	.65
Leadership	4.28	.84	3.97	.99	4.25	.87	3.71	1.01	4.05	.73
<b>APPROACH CHARACTERISTICS</b>	<b>4.57</b>	<b>.63</b>	<b>4.54</b>	<b>.63</b>	<b>4.57</b>	<b>.57</b>	<b>4.13</b>	<b>.75</b>	<b>4.45</b>	<b>.54</b>
Character	4.65	.74	4.34	.88	4.64	.71	4.16	.91	4.45	.64
Positive attitude	4.47	.76	4.46	.79	4.57	.69	4.08	.89	4.40	.64
Motivation	4.48	.81	4.65	.74	4.46	.73	4.11	.86	4.42	.62
Resilience	4.66	.71	4.72	.66	4.60	.69	4.17	.88	4.54	.57
<b>EMOTIONAL COMPETENCE</b>	<b>4.42</b>	<b>.68</b>	<b>4.03</b>	<b>.76</b>	<b>4.43</b>	<b>.68</b>	<b>3.88</b>	<b>.81</b>	<b>4.19</b>	<b>.58</b>
Empathy	4.39	.82	3.71	1.04	4.47	.76	3.91	.92	4.12	.67
Emotional self-regulation	4.42	.81	4.41	.88	4.37	.83	3.84	.89	4.26	.66
Connection	4.47	.78	3.96	.95	4.46	.76	3.88	.95	4.19	.65

**Table 5.2. Descriptive statistics, Cronbach's alphas and correlations for all variables**

Variable	<i>M</i>	<i>SD</i>	$\alpha$	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Involvement	5.92	.84	.56 (.24)	-											
2. Autonomy	5.31	.96	.64 (.38)	.23**	-										
3. Warmth	6.26	.76	.68 (.41)	.51**	.39**	-									
4. Emotional	4.73	.35	.67 (.34)	.46**	.25**	.55**	-								
5. Esteem	4.30	.53	<b>.78</b>	.32**	.28**	.45**	.52**	-							
6. Informational	3.19	.94	<b>.87</b>	.04	-.06	.06	.11	.33**	-						
7. Tangible	3.44	1.05	.62 (.45)	.08	-.05	.05	.25**	.34**	.63**	-					
8. Self-Perceptions	4.29	.54	<b>.83</b>	.14*	.15*	.18**	.22**	.23**	.07	.13*	-				
9. Behavioural Skills	4.21	.57	<b>.85</b>	.19**	.22**	.26**	.23**	.28**	.11	.12	.74**	-			
10. Social Skills	4.11	.59	<b>.89</b>	.13*	.23**	.21**	.21**	.30**	.05	.06	.69**	.74**	-		
11. Approach Characteristics	4.45	.54	<b>.90</b>	.15*	.16*	.22**	.19**	.25**	.08	.06	.78**	.77**	.76**	-	
12. Emotional Competence	4.19	.58	<b>.85</b>	.20**	.24**	.25**	.24**	.31**	.03	.01	.59**	.65**	.78**	.74**	-

*Note.* \*  $p < .05$ , \*\*  $p < .01$ . Reliability values in bold are acceptable. Scales with two reliability values in brackets failed to reach a Cronbach Alpha level of .70, but have fewer than five items, so the inter-item mean was cited as the second value (with a critical level of .20).

the POPS, the internal reliability of the subscales remained at a moderate level; therefore, mean inter-item correlation values are also reported for these subscales. This measure is appropriate for scales which have fewer than 10 items and where Cronbach alpha coefficients are low (Briggs & Cheek, 1984; Pallant, 2009). Two of the subscales of the PASS-Q also returned moderate alpha coefficients (i.e., emotional  $\alpha = .67$  and tangible  $\alpha = .62$ ) and so mean inter-item correlation values are also presented for these subscales. The remaining two subscales of the PASS-Q (i.e., esteem and informational) demonstrated good internal reliability ( $\alpha > .70$ ). Parents reported levels of all variables above the midpoint of the respective scales. Specifically, whilst all scores were high, parents reported particularly high levels of warmth, with autonomy support the lowest rated dimension of parenting style. Parents also reported providing higher levels of emotional and esteem support than informational and tangible support. The correlations between all variables are shown in Table 5.2. There was no evidence of multicollinearity between the predictor variables as all relevant correlations were below .70 (Tabachnick & Fidell, 1996). Effect sizes were also reported for both the repeated measure ANOVAs and the MANOVAs. Values of 0.01 were considered small, while those of 0.06 were considered moderate and values of 0.14 were considered large (Kirk, 1996).

**Most and least valued assets.** Preliminary analysis was conducted to offer an overview of the most and least valued assets perceived by parents. This required a vertical analysis of Table 1 using repeated measure ANOVAs with Greenhouse-Geisser corrections to ascertain the highest and lowest scores within each value category of importance, relevance, role and attention. In brief, the levels of importance ( $F(12.27, 3042.70) = 17.87, p < .001, \omega^2 = .07$ ); relevance ( $F(8.74, 2167.86) = 53.42, p < .001, \omega^2 = .18$ ); role ( $F(12.50, 3100.03) = 22.01, p < .001, \omega^2 = .08$ ); and attention ( $F(11.34, 2811.88) = 15.45, p < .001, \omega^2 = .06$ ) were all significantly different with respect to the assets considered, with moderate to large effect sizes. Post hoc tests using the Bonferroni correction revealed that self-esteem was regarded as significantly ( $p < .001$ ) more important for personal development and received more attention than most other assets whilst resilience was regarded as significantly ( $p < .001$ ) more relevant to swimming than most other assets. Character was revealed as being significantly ( $p < .05$ ) more a part of a parent's role to develop than most other assets. At the opposite end of the scale, perceived sport competence was significantly ( $p < .01$ ) less valued for personal development while empathy was significantly ( $p < .05$ ) less valued for

relevance to swimming performance than most other assets. Self-appraisal was revealed as the asset that parents considered significantly ( $p < .001$ ) less a part of their role to develop than most other assets while conflict resolution emerged as the asset that received the least attention by parents. When considering total asset value (TAV), which involved taking an average of the four dimensions (the final column within Table 5.1), results revealed large significant differences between the levels reported for each asset ( $F(11.68, 2896.95) = 36.43, p < .001, \omega^2 = .13$ ). Post hoc tests using the Bonferroni correction revealed that resilience was valued to a significantly ( $p < .01$ ) greater degree than most other assets while, at the other end of the scale, conflict resolution was valued to a significantly ( $p < .05$ ) lesser degree than most other assets.

**The five factor model.** The framework formulated in Study One, and supported in Study Two was further supported in this study with a CFA using the robust maximum likelihood method with EQS software (version 6.1; Bentler, 2003) providing an acceptable level of model fit (provided earlier in the chapter within the preliminary analysis section). Therefore, further analysis was conducted by taking a more detailed analysis of differences within and between the five asset groups.

**Perceived value of internal asset groupings.** When considering the five factor model, the degree to which parents perceived each of the five groups was examined once again with the use of repeated measure ANOVAs with Greenhouse-Geisser corrections. Moderate to large significant differences existed between reported levels of importance ( $F(3.62, 896.69) = 10.66, p < .001, \omega^2 = .04$ ); relevance ( $F(3.13, 775.68) = 71.38, p < .001, \omega^2 = .22$ ); role ( $F(3.67, 910.23) = 32.35, p < .001, \omega^2 = .12$ ); and attention ( $F(3.43, 850.06) = 22.37, p < .001, \omega^2 = .08$ ) depending upon the assets considered. Post hoc tests using the Bonferroni correction confirmed that approach characteristics were significantly ( $p < .05$ ) more valued within each of the four areas than the other groups of assets. Post hoc tests using the Bonferroni correction also confirmed that both the asset groups of emotional competence and social skills were considered significantly ( $p < .001$ ) less relevant for successful swimming than those of self-perceptions, behavioural skills and approach characteristics. Parents also rated behavioural skills as significantly ( $p < .05$ ) less a part of their role to develop than the other assets and reported that they gave significantly ( $p < .05$ ) less attention to the development of social skills than the other assets. A repeated measures ANOVA with Greenhouse-Geisser corrections on the total asset value also determined a large significant difference between the asset groupings ( $F(3.46, 858.35) = 47.84, p < .001,$

$\omega^2 = .16$ ). Overall, social skills were reported to be significantly ( $p < .05$ ) least valued while both approach characteristics and self-perceptions were valued to a significantly ( $p < .05$ ) greater degree than the other assets. Further repeated measure ANOVAs with Greenhouse-Geisser corrections revealed large differences between the levels of importance, relevance, role and attention within each asset grouping of self-perceptions ( $F(2.52, 625.81) = 40.20, p < .001, \omega^2 = .14$ ); behavioural skills ( $F(2.74, 679.45) = 55.26, p < .001, \omega^2 = .18$ ); social skills ( $F(2.49, 617.94) = 74.21, p < .001, \omega^2 = .23$ ); approach characteristics ( $F(2.16, 536.16) = 67.73, p < .001, \omega^2 = .22$ ); and emotional competence ( $F(2.70, 669.09) = 71.93, p < .001, \omega^2 = .23$ ). Post hoc tests using the Bonferroni correction revealed that, for all asset groupings, parents reported significantly ( $p < .05$ ) greater levels of importance, relevance and role than the amount of attention they currently gave to developing the assets.

### **A Structural Model of the Potential Antecedents of Asset Value**

The second objective of the study was to test a structural model of potential antecedents of asset value. To this end, a hypothesized model was formulated in which the three dimensions of parenting style positively predicted each of the four dimensions of social support. The social support dimensions were then hypothesised to predict each of the five asset groups. The proposed model was tested using the robust maximum likelihood estimation method due to Mardia's normalised estimate of multivariate kurtosis being relatively high (37.20), indicating non-normality in the data. This method ensured that overestimation of the  $\chi^2$  statistic was controlled for as well as adjusted for under identification of standard errors (Hu & Bentler, 1995). Within the model, the study variables were represented as latent variables. The four items measuring involvement, the three items measuring autonomy support and the three items measuring warmth were used as indicators of the three latent variables representing each facet of parenting style. The four items measuring emotional support, the four items measuring esteem support, the four items measuring informational support and the two items measuring tangible support were used as indicators of the four latent dimensions of social support. Each of the 17 assets was used as an indicator of their respective higher order asset groups (i.e., self-perceptions, behavioural skills, social skills, approach characteristics and emotional competence). Standardised factor loadings and uniqueness terms of the indicators used in the structural model are shown in Table 5.3.

**Table 5.3. Standardised factor loadings and uniqueness terms of all indicators in the structural equation model**

<b>Latent Factor and Observed Indicators</b>	<b>Loading</b>	<b>Uniqueness</b>
Involvement		
Item 1	.56	.83
Item 2	.72	.69
Item 3	.41	.91
Item 4	.29	.96
Autonomy Support		
Item 1	.64	.77
Item 2	.52	.86
Item 3	.70	.72
Warmth		
Item 1	.67	.74
Item 2	.75	.66
Item 3	.51	.86
Emotional Support		
Item 1	.75	.67
Item 2	.48	.88
Item 3	.55	.84
Item 4	.59	.81
Esteem Support		
Item 1	.63	.78
Item 2	.71	.70
Item 3	.70	.71
Item 4	.71	.71
Informational Support		
Item 1	.84	.55
Item 2	.79	.62
Item 3	.65	.76
Item 4	.87	.50
Tangible Support		
Item 1	.65	.76
Item 2	.71	.70
Self-Perceptions		
Item 1	.70	.71
Item 2	.81	.58
Item 3	.87	.49
Behavioural Skills		
Item 1	.80	.60
Item 2	.81	.58
Item 3	.82	.58
Social Skills		
Item 1	.80	.60
Item 2	.84	.54
Item 3	.80	.60
Item 4	.84	.55
Approach Characteristics		
Item 1	.82	.58
Item 2	.83	.56
Item 3	.86	.52
Item 4	.87	.50

**Table 5.3. Standardised factor loadings and uniqueness terms of all indicators in the structural equation model (continued)**

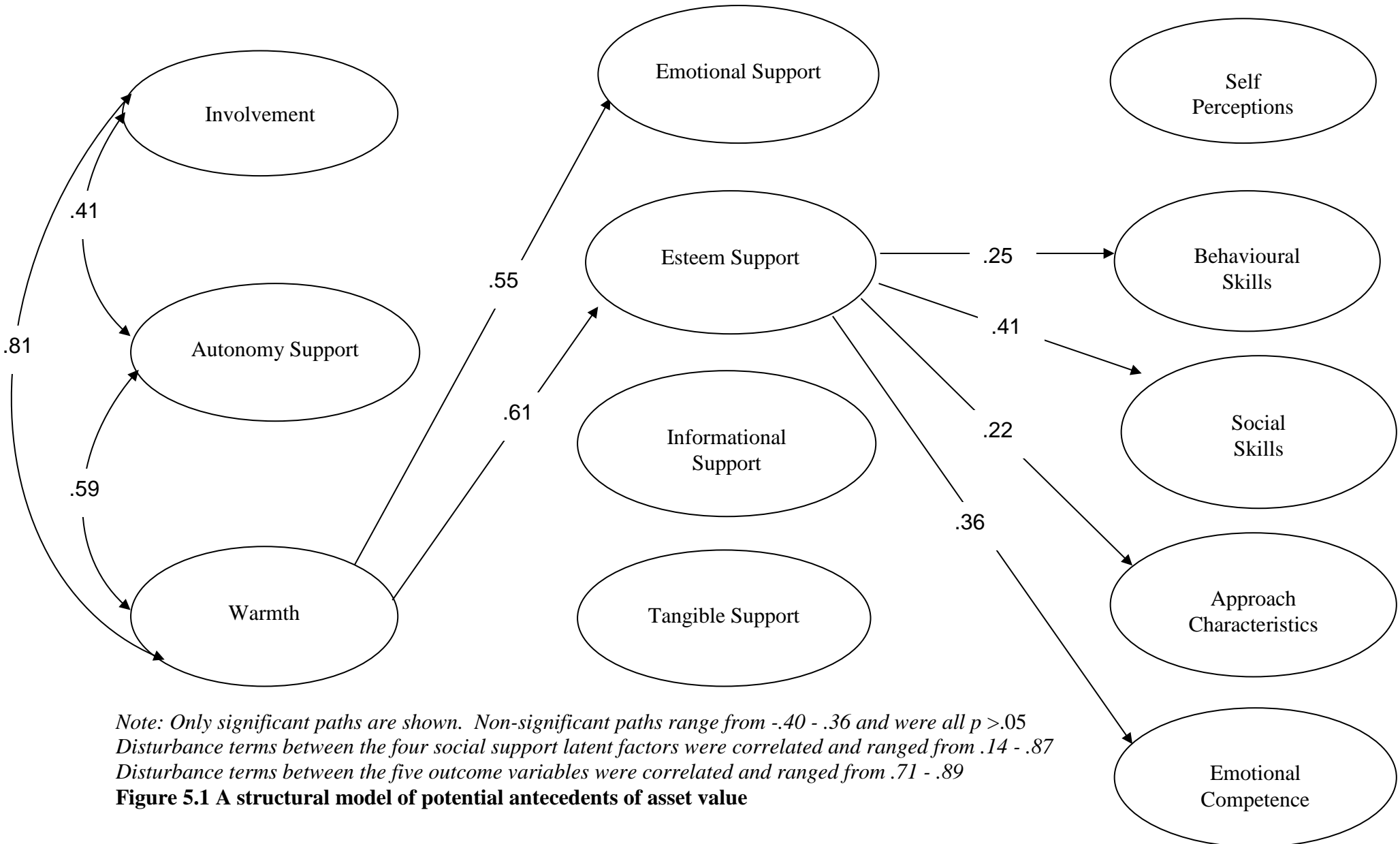
Emotional Competence		
Item 1	.77	.59
Item 2	.84	.70
Item 3	.82	.67

Model fit indices revealed that the proposed model fit the data well: Satorra-Bentler  $\chi^2$  (728) = 1003.33,  $p < .001$ ; CFI = .91; SRMR = .06; RMSEA = .04 (CI = .03-.05). The pathways between involvement and the dimensions of social support and between autonomy support and the dimensions of social support were non-significant. The pathways between emotional support, informational support and tangible support and the five asset groups were also all non-significant. However, as shown in Figure 5.1, warmth was a strong positive predictor of both emotional support and esteem support. In turn, esteem support was a weak positive predictor of the value placed on both behavioral skills and approach characteristics, and a moderate positive predictor of the value placed on both social skills and emotional competence. The indirect relationships among warmth and the value placed on social skills ( $\beta = .27$ ); approach characteristics ( $\beta = .27$ ); and emotional competence ( $\beta = .37$ ) were all significant ( $p < .05$ ). Parenting style accounted for 66% of the variance in emotional support provision and 39% of the variance in esteem support provision while it only explained 3% and 6% of the variance in informational and tangible support, respectively. In turn, social support accounted for 9% of the variance in the value placed on self-perceptions; 15% of that on behavioural skills; 15% of the value placed on social skills; 11% of that on approach characteristics and 19% of the value placed on the assets within the emotional competence group.

### **Discussion**

Research has consistently demonstrated the highly influential impact of parental beliefs and behaviours on a vast array of sport related outcomes in children (e.g., Babkes & Weiss, 1999; Keegan, Harwood, Spray & Lavalley, 2009; Keegan, Spray, Harwood, & Lavalley, 2010; Ullrich-French & Smith, 2006). However, papers considering parental perspectives of positive youth development are limited. The current study sought to address two objectives, the first of which was to provide a greater understanding of the levels of value that parents attached towards the 17 psychosocial assets developed through investigations in Studies One and Two of this thesis.





*Note: Only significant paths are shown. Non-significant paths range from -.40 - .36 and were all  $p > .05$   
 Disturbance terms between the four social support latent factors were correlated and ranged from .14 - .87  
 Disturbance terms between the five outcome variables were correlated and ranged from .71 - .89*

**Figure 5.1 A structural model of potential antecedents of asset value**

Parents reported value levels well above the mid-point for all assets and asset groups; however, as with the coaches in the previous study, parents did appear to value particular assets over and above others. It is of note that no gender, age or other differences were found between those parents that valued these assets to a greater degree than others. Parents reported a similar value profile to the coaches, suggesting that both parents and coaches are alike in their opinions as to which assets should be the focus of development for the child within (or through) a swimming context. Specifically, the more intrapersonal assets contained within the approach characteristics group (character, positive attitude, motivation and resilience) were rated significantly higher across the four value dimensions of importance, relevance, role and attention. Conversely, the more interpersonal assets within both the emotional competence and social skills groups were rated significantly less relevant than those within the self-perceptions, behavioural skills and approach characteristic groups. Finally, the assets within the social skills group were found to be significantly least valued when the Total Asset Value scores were analysed. These results provide a direct contrast to past qualitative research with parent, coach and athlete populations in which social skills and the assets contained therein (e.g., communication, leadership, conflict resolution and cooperation) have been cited as assets of primary developmental importance (Camiré et al., 2009a, 2009b; Holt et al., 2008; Jones & Lavalée, 2009a; Strachan et al., 2011). Although the individual nature of the sport may go some way to explaining these current findings, recent research investigating talent development in tennis found parents to perform a crucial role in the social and emotional development of their child-players (Gould, Lauer, Rolo, Jannes, & Pennisi, 2008; Lauer, Gould, Roman, & Pierce, 2010). Within swimming, athletes themselves report the importance of the assets contained within these groups; for example, developing meaningful relationships with coaches, parents and peers was reported as a positive experience within swimming and the social element of the sport was cited as a major source of enjoyment (Fraser-Thomas & Côté, 2009). Athletes participating in this study also cited examples of working together in training and competition to support and encourage one another and noted specific opportunities provided to them to develop leadership skills. Communication and conflict resolution were also highlighted as skills the swimmers felt they developed within the sport, while a family-focused atmosphere relating to the hosting of Christmas parties, banquets and fundraising events by clubs contributed to the development of a sense of community (Fraser-Thomas & Côté). These examples,

therefore, illustrate a disparity between both the parental views as reported in the current study and the coaches' views as reported within the previous study. Whilst Fraser-Thomas & Côté call for better coach education on social and emotional development, the results of the current study suggest an equal requirement for parental education. Indeed, Gould et al. (2008) call for increased support for parents in the form of appropriately developed interventions based on prior research and we would echo this requirement.

### **Intention versus Attention**

Parents also reported a similar profile to coaches when analysis between the four value dimensions was undertaken. Similarly to coaches, parents reported attending to the development of each asset to a significantly lesser degree than their perceptions of the asset being important to their child's personal development, relevant to successful swimming and part of their role as a parent. This discrepancy between perception and action (i.e., cognition and behaviour) in both groups does give rise for concern. The lack of behavioural attention by one group (e.g., coaches) could be counterbalanced by greater attention from the other group (i.e., parents), yet it is difficult to ascertain if either group are currently appropriately compensating for the other or if both, in combination, are providing adequate support for the development of the assets.

### **A Structural Model of the Potential Antecedents of Asset Value**

The second purpose of the current study was to empirically investigate the psychosocial antecedents to the value that parents attached to these aforementioned assets. Specifically, links between parental perceptions of both parenting style and the social support that they make available to their child-swimmers in the sporting context were measured and tested in relation to the value placed on each of the five groups of assets. In this respect, we hoped to gain a greater understanding of the ways in which the parent-child relationship may impact upon positive youth development through sport.

Social support has long been proposed as a crucial element of success in performance environments (e.g., Bloom, 1985) and particularly within sport (e.g., Côté, 1999). Further, qualitative research has continued to cite social support as a strong antecedent of talent development (e.g., Wolfenden & Holt, 2006), mental toughness (Connaughton, Wadey, Hanton, & Jones, 2008) and the development of internal assets (e.g., Camiré et al., 2009a). This study measured three elements of parenting style, namely, involvement, autonomy support and warmth, and results indicated that only

warmth significantly impacted upon social support, with high levels of warmth positively predicting high levels of emotional and esteem support. In turn, esteem support was a strong positive predictor of the value placed on all of the asset groups aside from self-perceptions. Furthermore, high levels of warmth indirectly predicted parental value of the assets within the social skills, approach characteristics and emotional competence groups. These findings are unique to this study and suggest alternative methods to increase parental engagement in assisting with the development of internal assets as a part of positive youth development through sport.

It is also important to comment on the paths that were not significant in this model. All paths were tested due to the exploratory nature of this work, but several results were non-significant and there may be logical explanations for these. For example, neither involvement nor autonomy-support predicted any element of perceived social support. On reflection and in considering both the definition of autonomy-supportive parenting as “value and use techniques which encourage independent problem solving, choice, and participation in decisions” (Grolnick & Ryan, 1989, p.144), and the items within the POPS that were designed to measure autonomy-support, no logical links between autonomy supportive parenting and the social support dimensions are clear. In fact, while autonomy support does require the presence of appropriate boundaries, it could be argued that provision of informational support (giving advice) and tangible support (helping with travel to training) may not be reflective of autonomy supportive parenting. Similarly, providing informational and tangible support should not be expected to develop the assets within the athletes, or, in this case, the value attached to the assets by the parent.

### **Implications and Limitations**

The present study has made several contributions to positive youth development research. Firstly, the findings have demonstrated that parents value the assets related to positive psychosocial development and that their value profile is very similar to that of swimming coaches with the intrapersonal assets valued more so than the interpersonal assets. As with the previous study, therefore, there is a need to develop bespoke educational programs aimed at better informing parents on the preferential ways to interact with their child-athletes in regards to swimming and, specifically, in regards to the social and emotional assets. Within tennis, Lauer et al., (2010) retrospectively interviewed players who had attained a top 200 world ranking, their coaches and their parents and reported some excellent examples of parental strategies that participants felt

helped support the players in their development. Examples included limiting the amount of time spent talking about tennis in order to reduce the perceived importance of the sport in addition to helping the athlete maintain perspective. Acting as positive role models by maintaining control of emotions, instilling a hard work ethic and encouraging good on court conduct were also reported as useful. Emotional and tangible support were also cited as important to provide throughout the child's athletic career, a finding in contrast to the one noted in the current study, yet something that may be worthy of discussion in group education sessions.

These educational initiatives could also go some way to addressing the discrepancies between the value parents placed on the assets in regards to importance and relevance and the amount of attention that they currently gave to developing the assets. The provision of specific behaviours that parents could use to assist with internal asset development in addition to the use of the more accessible terms and definitions as developed within Study One of this thesis may help parents to link their everyday behaviours with the development of some of these key assets.

Finally, the important role of esteem support for increasing asset value also allows practical suggestions to be made regarding behaviors that parents could direct towards asset development. The results suggest that encouraging parents to incorporate more elements of warmth in their parenting style will result in increased provision of emotional and esteem support in sport. Those parents who reported that they provide high levels of esteem support, also placed increased value on the behavioural, social, approach and emotional assets. By encouraging greater provision of esteem support, it may be possible to increase parental value on the assets - specifically on the social and emotional assets. Freeman and Rees (2009) found that athlete perceptions of available esteem support was the most important dimension of support in regards to predicting performance, with high levels of such support associated with high levels of performance. Therefore, promoting greater provision of esteem support from parents may have additional benefits, particularly within a performance focused, elite level youth program. As such, increasing parental awareness of the importance of esteem support and providing parents with strategies through which they could look to provide such support should be a focus for sports planners and administrators. Items from the support and style measures used in the present study provide examples of specific forms of warmth and esteem support that may be beneficial. For example, a parent who displays a high degree of warmth believes that they clearly convey their love for their

child and makes them feel very special. They also indicated that they were typically happy to see their child. Those who displayed high levels of esteem support believed they enhanced their child's self-esteem, gave them confidence to deal with pressurised situations and boosted their sense of competence, most likely by reinforcing the positives.

This study makes a contribution to the literature by proposing the psychosocial antecedents of parental asset value, namely perceptions of parenting style and social support availability. These may help to explain why some parents place greater value on certain psychosocial assets compared to other parents. Importantly, the findings in the present study can be extended in a number of ways. First, while the current study has provided a snapshot of the link between parental perceptions of their parenting style, their provision of social support and the value they place on the psychosocial assets, it is well documented that the type and level of parental involvement and support changes as the child ages (e.g., Bloom, 1985; Camiré et al, 2009a; Connaughton et al, 2008; Côté, 1999). It would therefore be salient to examine how the relationships proposed in the model vary as a function of athlete age. Related to this, although no gender differences were found between those parents who valued particular assets to a greater degree than others, further examination would be useful to determine whether differences in the relationships proposed in the model vary between mothers and fathers, as well as single parents compared to intact families.

In addition, similar models may be tested to assess these relationships from both a coach and athlete perspective. Coaches could comment upon perceptions of their coaching style and the social support that they believe they provide in addition to reaffirming the value they place on the assets. Meanwhile, athlete perceptions of coaching and parenting style and coach/parent provisions of social support could also be investigated and establishment of a model to link these factors to the development of one or more of the psychosocial assets would provide clearer evidence of the social mechanisms of development. Empirical evidence could therefore be provided to support Holt et al.'s (2009) suggestion that supportive parenting enhances child and adolescent well-being and intrinsic motivation. For all participant groups, models for each of the three different age ranges represented within this thesis (i.e. age group swimmers who are aged 13 years and under; youth swimmers who are aged between 14 and 16 years if female and 14 and 18 years if male; and senior swimmers who are 17 years and older if female and 19 years and older if male) would be appropriate to cross-

sectionally investigate potential differences between the relationships established in this study at each age range. A progression of this would be a longitudinal approach to track swimmers, their parents and their coaches over time to ascertain which assets are most important 'when' and the impact of the relationship between coach/parenting style and the provision of social support to asset development.

A number of limitations to the present study are also important to note. First, all variables within this study were assessed by self-report, resulting in the possibility of parents responding in a socially desirable manner in regards to the value they placed on the assets. Due to the sensitive nature of some of the questions, for example, regarding parenting styles and practices, parents may have been concerned about others passing judgment on their responses and so may have avoided extreme responses. Parents may also have struggled to accurately assess the amount of attention they currently give to developing the assets. All of these factors may have led to inflated relationships between the variables of interest. Athlete perceptions of parenting style and available social support alongside parental self-assessments would provide for an interesting dyadic design that would most importantly harness the athlete's perspective of the relationship. Further, the present study assessed parental perceptions of social support provision within the context of swimming, and caution should therefore be exercised in generalising these findings to other sports. Finally, the excessive modifications to the POPS scale and the low Cronbach values that remained even after the CFA was conducted, does give rise to concern over the validity and reliability of this measure. However, we retained these items because the model converged, no negative error variances were found and all items loaded strongly onto the respective subscales. That said, it is reasonable to view these results with some caution. In view of the modifications, it may be worthwhile for a specific validation study on the POPS to be conducted, or for a more psychometrically strong questionnaire to be selected for future research in this area. It is worthwhile to note that whilst the autonomy supportive dimensions of parenting have emerged as important in the context of parenting in sport (Camiré et al., 2009a; Holt et al., 2009; Wolfenden & Holt, 2006), the POPS is currently the only instrument that allows measurement of this dimension. This may be particularly important given Camiré et al.'s (2009a) call for increased attention on the effect of parental support on the development of life skills.

To summarise therefore, this study serves to advance our knowledge of sport and developmental psychology by providing greater insight into parental perceptions of

the internal assets related to positive youth development in swimming. Furthermore, it offers a preliminary insight into relationships between parenting styles and perceptions of social support availability and how these may influence the value that parents attach to specific assets.





# Chapter Six

Study Four: Investigating the links between perceived parenting and coaching style, support availability and psychosocial development

The focus of this thesis thus far has been on understanding the role that parents and coaches play in the psychosocial development of young athletes by examining the degree to which both of these groups contribute to and act as providers of external assets. The previous two chapters have considered coach and parent perspectives of the internal assets considered important for positive youth development in swimming. This was progressed by testing a proposed model wherein internal asset value was predicted by perceptions of available social support which, in turn, was predicted by perceptions of parenting style. As significant providers of the external assets of development, a greater appreciation of coach and parent viewpoints was identified. However, in order to ensure the complete triadic relationship is examined (i.e., coach-athlete-parent), otherwise known as the athletic triangle (Smoll, Cumming, & Smith, 2011), the developing individual's perspective also needs to be assessed. Therefore, the current study sought to gather athlete perceptions of the most important and relevant concepts that have emerged in the previous two studies. Specifically, the main purpose of the current study was to test two proposed models of the potential antecedents of asset level (one coach-related and one parent-related) that mirror the model that was tested in Study Three.

### **Rationale and Development of the Structural Models**

Research by Gould and Carson (2010) used the Youth Experiences Survey - 2 (YES-2; Hansen & Larson, 2005) with a sample of 190 former high school students to explore links between athlete perceptions of coach behaviours and the level of internal assets through participation in high school sport. Coaching behaviours were assessed using the Coaching Behaviour Scale for Sport (CBS-S; Côté et al., 1999) in addition to a bespoke measure based on qualitative results of Gould et al. (2007). This latter measure was employed to capture elements of coaching behaviours more specifically related to facilitating the development of internal assets. Results revealed that athletes who reported having coaches who talked through competition strategies, encouraged and assisted with goal-setting, talked about the transferability of sports skills to other aspects of life and developed a positive rapport with the athletes also reported high levels of emotional regulation, cognitive skills, feedback, pro-social norms and linkages to the community on the YES-2 measure. The authors concluded therefore that athlete perceptions of particular coaches' actions and behaviours did explain the development of particular internal assets and that the development of internal assets within sport is more complex than was initially thought. Furthermore, the authors suggested that more

work needs to be conducted to identify the most effective strategies that coaches use to develop positive relationships with their athletes. For example, Gould et al. (2012) found that coaches who created environments aimed at promoting high levels of task involvement and low levels of ego involvement, and that had elements of caring, had the most positive impact on the development of internal assets.

Prior to the study conducted by Gould and Carson (2010), Strachan et al. (2009) administered the Developmental Assets Profile (DAP; Search Institute, 2004), the Athlete Burnout Questionnaire (ABQ; Raedeker & Smith, 2001) and the Sources of Enjoyment in Youth Sport Questionnaire (SEYSQ; Wiersma, 2001) to 123 young athletes (12-16 years) of varying competitive backgrounds. Regression analyses found that the internal asset group of positive identity and two external asset groups of empowerment and support were associated with burnout and enjoyment. Two path models were then designed and tested. In the first model, the external asset of empowerment was found to be predictive of both positive identity and enjoyment. The second model suggested a mediating effect of positive identity on the relationship between support and burnout. In this second model, a significant negative relationship was found between support and positive identity and a significant positive path between positive identity and burnout. Therefore, the second model suggested that the presence of support resulted in decreased levels of personal identity and this diminished personal identity then resulted in a lower incidence of burnout. While this result appears surprising, the authors suggest that the athletes within the study had linked their personal identity with their sport or athletic identity. Sport identity has previously been linked with perceived sport competence and with task and ego orientation. Lau, Fox and Cheung (2004) sampled 100 children (12-13 years) in order to identify the psychosocial and socio-environmental antecedents of sport identity and successfully tested a structural model in which perceived sport competence was found to be a strong positive predictor of sport identity and both task and ego orientation were, individually, moderate positive predictors of perceived sport competence.

Within Benson's Developmental Assets Framework (Benson et al., 1998; Leffert et al., 1998), the positive identity asset group contains four internal assets; namely, personal power, self-esteem, sense of purpose and a positive view of the future. Personal power and a sense of purpose were conceptually linked to clear and positive identity in Study One of this thesis, while a positive view of the future was linked to positive attitude. Self-esteem is independently represented as one of the 17 assets.

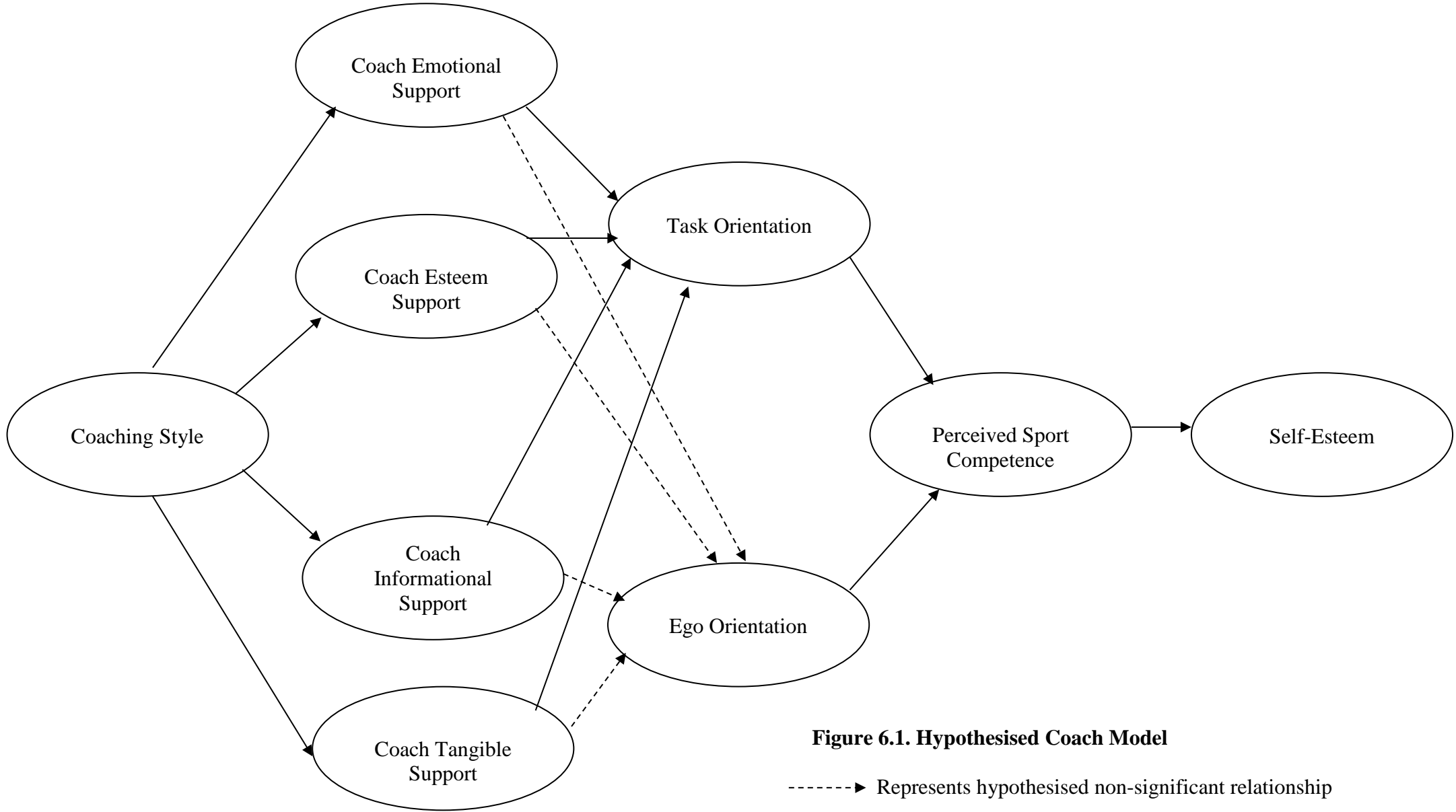
Given the results of the two studies just noted, task and ego orientation (as representatives of the motivation asset), perceived sport competence and self-esteem would appear to be salient assets to select from the 17 asset framework to test if the constructs of social support and parenting style influenced asset level in swimmers in the same way that they do for asset value in parents. Further support for the use of these two constructs as antecedents of psychosocial assets is also provided by Strachan and colleagues (2009). As argued in the previous study, empowerment can be linked to autonomy (Vallerand, 2001) and support is thought to represent the dimensions of perceived available social support. While Strachan et al. and Benson's Developmental Assets Framework set these two external assets alongside one another, the previous study successfully tested a model in which an autonomy-supportive parenting style predicted perceived social support, with 66% of the variance in emotional support and 39% of the variance in esteem support predicted by this specific parenting style.

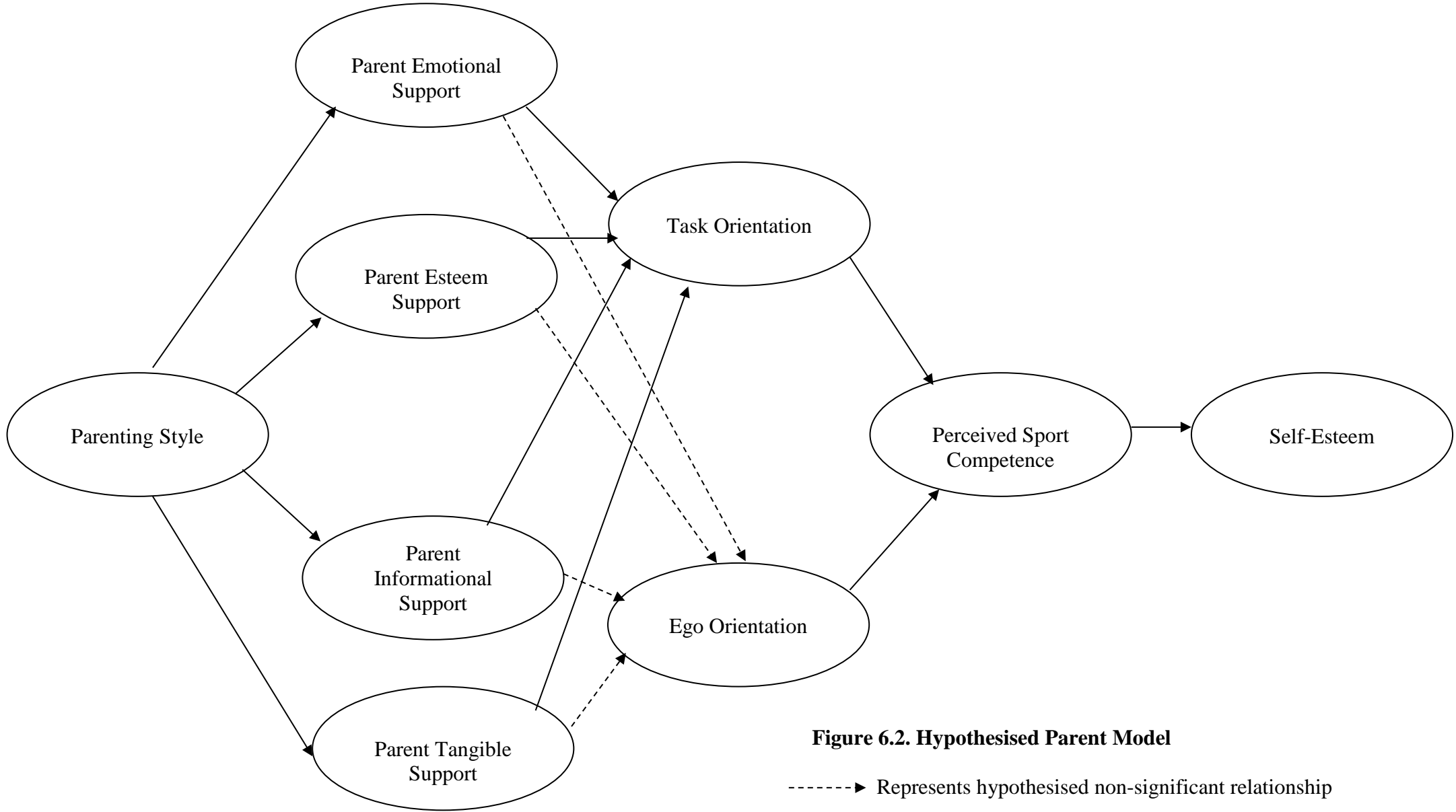
### **Summary and Hypothesis: Model One**

These studies in combination, therefore, provide the rationale for testing the first model which examines the role played by the coach in contributing to the levels of selected psychosocial assets. Figure 6.1 portrays the hypothesised model. This first model will measure athlete perceptions of an autonomy supportive coaching style, perceptions of social support made available to them by coaches and the three internal assets of motivation (as measured by task and ego goal orientation), perceived sport competence and self-esteem. As with the model tested in Study Three, athlete perceptions of coaching style will serve as a global measure of coach behaviours, which we hypothesise will positively predict athlete perceptions of each dimension of available social support from the coach at the contextual level. We further hypothesise that athlete perceptions of social support will positively predict the level of task orientation and either negatively predict or have no significant relationship with the development of ego orientation. Finally, task and ego orientation are both hypothesised to positively predict perceived sport competence which is, in turn, hypothesised to positively predict self-esteem (Biddle, Wang, Kavussanu, & Spray, 2003; Lau et al., 2004).

### **Summary and Hypothesis: Model Two**

The second model to be tested will consider the role played by the parent in contributing to the levels of these internal assets and is based on the model that was tested in the previous study. Figure 6.2 provides a representation of the model.





Specifically, athlete perceptions of an autonomy-supportive parenting style characterised by high levels of warmth, autonomy-support and involvement will be assessed. This parenting style is hypothesised to positively predict perceptions of each dimension of available social support from the parent. These perceptions of social support will, in turn, positively predict task orientation and negatively predict or have no significant relationship with ego orientation. Finally, task and ego orientation are both hypothesised to positively predict perceived sport competence which is, in turn, hypothesised to positively predict self-esteem.

## **Method**

### **Participants**

Participants were 246 British swimmers (94 males, 135 females and 17 participants who did not declare their gender;  $M$  age = 15.64 years,  $SD$  = 2.85, range = 12-24 years). The majority of participants ( $n$  = 214) indicated that swimming was their main sport, having participated in the sport for an average of 7.96 ( $SD$  = 3.84) years and spending an average of 13.79 ( $SD$  = 5.36) hours a week training. Swimmers had competed at a variety of competitive levels including club ( $n$  = 23), county ( $n$  = 77), national age group/youth ( $n$  = 64), national senior ( $n$  = 26), international junior ( $n$  = 20) and international senior ( $n$  = 19).

Approval to conduct the study was attained from a University Ethical Advisory Committee and data collection occurred concurrently to the previous study investigating parental involvement in swimming. This ensured parental involvement and consent for those athletes who were under 18 years of age. As with the previous study, parents and athletes were made aware of the research and invited to participate via a variety of means including the ASA's website, individual swim club websites, coach and personal contacts and attendance at a national level trials event. Prospective participants were provided with detailed information that fully explained the purpose and procedures of the research (see Appendix 8), and were made aware that their involvement was anonymous and voluntary. Athletes who consented to participate then completed a multi-section questionnaire that took approximately 15 minutes to complete (see Appendix 9). Both online (using SurveyMonkey Inc.<sup>TM</sup>) and paper copies of the questionnaire were made available to athletes and both options were utilised. The athletes were encouraged to think about the parent with whom they had the most interaction and involvement with regard to their swimming when completing the questionnaire. Athletes who may have worked with more than one coach were also

asked to think about the coach with whom they spent the most time when completing the questionnaire. The majority of participants indicated that they completed the questionnaire whilst thinking about their mother ( $n = 153$ ; 68.3%) and whilst thinking about a male coach ( $n = 162$ ; 72.3%).

## Measures

**Parenting style.** Athlete perceptions of parenting style were assessed using the 21-item Perceptions of Parents Scale College-Student Version (POPS; Robbins, 1994). The scale was designed to Grolnick's parenting style model as previously described (Grolnick, Deci & Ryan, 1997) and measured the three dimensions of autonomy support, involvement and warmth. Autonomy support was measured using nine items (e.g., "My parent, whenever possible, allows me to choose what to do"), involvement was measured using six items (e.g., "My parent spends a lot of time with me"), and warmth was measured using six items (e.g., "My parent makes me feel very special"). Responses were noted on a Likert scale ranging from 1 (*not at all true*) to 7 (*very true*). Robbins (1994) provided preliminary evidence for the reliability and validity of this scale. Further reliability and validity evidence for the scale was provided more recently by Niemiec et al. (2006).

**Coaching Style.** Athlete perceptions of autonomy-supportive coaching behaviours in swimming were assessed using the 6-item short form of the Sport Climate Questionnaire (SCQ; Standage, Duda, & Ntoumanis, 2006). Athletes were asked the extent to which they agreed with each of six items on a 7-point scale. The items in the SCQ are similar to those included in the Health Care Climate Questionnaire (Williams, Grow, Freedman, Ryan, & Deci, 1996), the Learning Climate Questionnaire (Williams & Deci, 1996) and the Work Climate Questionnaire (Baard, Deci, & Ryan, 2004), with the exception of who is being identified as the key individual in the supervisory role (i.e., physician, instructor, manager, coach). Consistent with the other versions of the climate questionnaires, the items do not reflect the specific autonomy-supportive behaviours exhibited by the coach but rather the general perception on the part of the athlete that the coach demonstrates an interpersonal style that is supportive of the athletes' needs (e.g. "I feel that my coach provides me with choices and options"). Research using the various versions of the climate questionnaire have provided evidence that the items reflecting an autonomy-supportive interpersonal style are reliable and valid (e.g., Reinboth, Duda, & Ntoumanis, 2004; Standage et al., 2006; Williams & Deci, 1996; Williams et al., 1996).



**Perceived social support.** Athletes' perceptions of the social support that was made available to them by parents and coaches was measured using the Perceived Available Support in Sport Questionnaire (PASS-Q; Freeman et al., 2011). This 16-item measure was administered twice to athletes, once to assess perceptions of support provided by parents and a second time to assess perceptions of support provided by coaches. The parental support version used the stem "to what extent is your parent someone..." while the coach support version used the stem "to what extent is your coach someone...." The measure assessed emotional support using four items (e.g., "who provides you with comfort and security"), esteem support using four items (e.g., "who reinforces the positives"), informational support using four items (e.g., "who gives you tactical advice"), and tangible support using four items (e.g., "who helps with travel to training and competitions"). Participants were asked to rate their provision of each type of support on a five-point Likert scale ranging from 1 (*not at all*) to 5 (*extremely*). Freeman et al. (2011) provided initial evidence for the factorial validity and internal consistency of the measure. The factor structure was tested using confirmatory factor analysis (CFA) with maximum likelihood estimation using LISREL 8.3 (Jöreskog & Sörbom, 1996) and the four factor model was found to have reasonable fit: Satorra-Bentler  $\chi^2(98) = 143.97, p < .001$ ; CFI = .94; SRMR = .06; RMSEA = .05. Cronbach's alpha internal reliability coefficients for the four dimensions ranged from .68 to .87, composite reliabilities ranged from .69 to .87, and test-retest reliabilities ranged from .73 to .84. The correlations between the four factors ranged from moderate ( $r = .40, p < .05$ ) to high ( $r = .84, p < .05$ ).

**Motivational Orientation.** The Achievement Goal Scale for Youth Sports (Cumming, Smith, Smoll, Standage, & Grossbard, 2008) was used to measure swimmers' levels of task and ego goal orientations and is an instrument specifically designed for a youth population. The 12 item measure asks athletes to consider their goals in swimming and to circle the answer that is most correct for them. Task orientation was assessed using six items (e.g., the most important thing is to improve my skills) and ego orientation was also assessed using six-items (e.g., I want to be better than others at my sport"). Responses are measured on a 5-point Likert scale and range from 'not at all true' to 'very true' and a total score for each subscale of task and ego is calculated. Cumming et al. (2008) provided initial evidence for the factorial validity and internal reliability of the measure. An exploratory factor analysis (EFA) yielded a 2-factor solution which was confirmed using CFA maximum likelihood

estimation using EQS 6.1 (Bentler, 2005): Satorra-Bentler  $\chi^2$  (53) = 244.52,  $p < .001$ ; CFI = .95; SRMR = .06; RMSEA = .05. Cronbach's alpha internal reliability coefficients were .78 for task orientation and .88 for ego orientation and test-retest reliabilities were .92 for task and .95 for ego scores.

**Perceived Sport Competence.** A three-item scale adapted from Williams and Deci (1996) and used in Conroy, Coatsworth and Fifer (2005) within a similar population was used to measure perceived sport competence. Athletes were asked to respond to the first two items, "How good at swimming are you?" and "How good would you be at learning something new in swimming?" on a 7-point Likert-type scale ranging from 1 (*not at all good*) to 7 (*very good*). The third item, "How confident are you in your swimming ability?" was rated on a similar scale ranging from 1 (*not at all confident*) to 7 (*very confident*). Within the Conroy et al. study, this measure was administered on three separate occasions and showed good internal reliability with Cronbach's alpha internal reliability coefficients ranging from 0.71 to 0.79.

**Self-Esteem.** Also used in Conroy et al. (2005) within a similar population, this 6 item scale assessed self-esteem from the six positively worded items from the Washington Self-Description Questionnaire (Smoll et al., 1993). Items included, "I feel pretty sure of myself" and "I like being the way I am". Athletes responded to each item on a scale ranging from 1 (*not like me*) to 4 (*very much like me*). This scale yielded a single score for positive self-esteem. The measure proved to have good internal reliability with a Cronbach's alpha internal reliability coefficient of 0.85.

## Results

### Preliminary Analyses

Confirmatory factor analysis (CFA) using the robust maximum likelihood method with EQS software (version 6.1; Bentler, 2003) was employed to determine the factor structure of the measures utilised in the study. Following suggestions by Hu and Bentler (1999) and Marsh (2007), the Standardized Root Mean square Residual (SRMR), the Comparative Fit Index (CFI) and the Root Mean Square Error of Approximation (RMSEA) were employed to evaluate factor structure. According to Hu and Bentler (1999), CFI scores that are equal to or above 0.95 as well as RMSEA and SRMR with values less than 0.06 are considered excellent criteria for model fit. The less restrictive criteria of RMSEA and SRMR with values greater than 0.08 and CFI scores less than 0.90 generally indicate that the fit of the model to the data is less than satisfactory.

As with Study Three, the POPS was found to have poor factor structure: Satorra-Bentler  $\chi^2(186) = 541.81, p < .001$ ; CFI = .72; SRMR = .11; RMSEA = .09 (CI = .08-.10). Examination of the standardised loadings and modification indices revealed the need to remove two items from the involvement subscale (item numbers 6 and 18), six items from the autonomy support subscale (item numbers 1, 2, 5, 14, 19, 21) and three items from the warmth subscale (4, 13, 20). This revised POPS showed acceptable factor structure: Satorra-Bentler  $\chi^2(41) = 85.58, p < .001$ ; CFI = .92; SRMR = .06; RMSEA = .07 (CI = .05-.09). Variable reduction procedures such as this are justified because the original structure is retained but with only the best performing indicators (Hofmann, 1995). The items retained in this study are the same as those retained in Study Three.

The measures assessing coaching style: Satorra-Bentler  $\chi^2(9) = 26.44, p < .001$ ; CFI = .95; SRMR = .04; RMSEA = .09 (CI = .05-.13); parent social support: Satorra-Bentler  $\chi^2(98) = 188.84, p < .001$ ; CFI = .93; SRMR = .06; RMSEA = .06 (CI = .05-.07); coach social support: Satorra-Bentler  $\chi^2(98) = 218.03, p < .001$ ; CFI = .91; SRMR = .06; RMSEA = .07 (CI = .06-.08); motivational goal orientations: Satorra-Bentler  $\chi^2(53) = 110.82, p < .001$ ; CFI = .94; SRMR = .05; RMSEA = .07 (CI = .05-.08); and self-esteem: Satorra-Bentler  $\chi^2(9) = 21.28, p < .001$ ; CFI = .97; SRMR = .04; RMSEA = .08 (CI = .03-.12) were all found to have acceptable factor structure.

### **Descriptive Statistics and Scale Reliabilities**

The means, standard deviations and Cronbach's alpha coefficients were calculated for each subscale and are presented in Table 6.1. All subscales demonstrated good internal reliability ( $\alpha > .70$ ) aside from the involvement subscale for which the mean inter-item correlation is also presented (Briggs & Cheek, 1986; Pallant 2009). Athletes reported levels of all variables above the midpoint of the respective scales. Specifically, reported levels of parental involvement, autonomy-support and warmth were relatively high and were comparable, with little difference between the three subscales. Athletes reported emotional support as the greatest form of support provided by parents and informational support as the least support offered by parents. This was the opposite for coaches, from whom athletes reported receiving informational support the most while tangible support was proffered least. Athletes also reported high levels of task orientation combined with moderate to high ego orientation. Perceived sport competence levels were high while levels of self-esteem were moderate. The

**Table 6.1 Descriptive statistics, Cronbach's alphas and correlations for all variables**

	<b>Variable</b>	<b>M</b>	<b>SD</b>	<b><math>\alpha</math></b>	<b>1.</b>	<b>2.</b>	<b>3.</b>	<b>4.</b>	<b>5.</b>	<b>6.</b>	<b>7.</b>	<b>8.</b>	<b>9.</b>	<b>10.</b>	<b>11.</b>	<b>12.</b>	<b>13.</b>	<b>14.</b>	<b>15.</b>	<b>16.</b>
1.	Involvement	5.46	1.03	.62 (.36)	-															
2.	Autonomy	5.52	1.11	.74	.49**	-														
3.	Warmth	5.77	1.06	.77	.61**	.61**	-													
4.	Parent Emotional	4.58	.53	.84	.53**	.49**	.71**	-												
5.	Parent Esteem	3.92	.79	.90	.56**	.51**	.60**	.62**	-											
6.	Parent Informational	3.33	1.07	.70	.29**	.21**	.30**	.34**	.59**	-										
7.	Parent Tangible	3.89	.83	.89	.47**	.28**	.43**	.50**	.62**	.70**	-									
8.	Coach Autonomy Support	5.35	1.05	.83	.17**	.27**	.22**	.40**	.28**	.08	.12	-								
9.	Coach Emotional	3.53	.94	.90	.10	.20**	.19**	.26**	.33**	.22**	.19**	.60**	-							
10.	Coach Esteem	4.07	.76	.86	.20**	.30**	.26**	.40	.34**	.08	.13*	.71**	.69**	-						
11.	Coach Informational	4.41	.72	.89	.09	.20**	.15*	.31**	.18**	-.02	.06	.62**	.52**	.80**	-					
12.	Coach Tangible	3.27	.91	.73	.08	.20**	.15*	.19**	.26**	.14*	.10	.51**	.70**	.63**	.53**	-				
13.	Task Orientation	26.16	3.21	.77	.15*	.35**	.27**	.38**	.31**	.18**	.25**	.32**	.26**	.40**	.39**	.22**	-			
14.	Ego Orientation	22.39	5.87	.92	.01	.11	.16*	.17**	.15*	.14*	.16**	.17**	.10	.23**	.24**	.14*	.28**	-		
15.	Perceived Sport Competence	5.04	1.02	.72	.16*	.25**	.32**	.36**	.28**	.11	.21**	.27**	.64**	.27**	.25**	.21**	.39**	.32**	-	
16.	Self Esteem	2.76	.62	.83	.11	.29**	.31**	.35**	.33**	.19**	.26**	.27**	.13*	.18**	.14*	.14*	.35**	.28**	.61**	-

correlations between all variables are shown in Table 6.1. There was no evidence of multicollinearity between the majority of variables as all relevant correlations were .70 or below (Tabachnick & Fidell, 1996), apart from the subscales of coach social support. Specifically, swimmers' perceptions of coach informational support and coach esteem support were highly correlated (.80). Given this finding, it was determined that using a collective score of coach social support would be most appropriate for the remaining analysis, whilst individual aspects of support were unable to be clearly delineated.

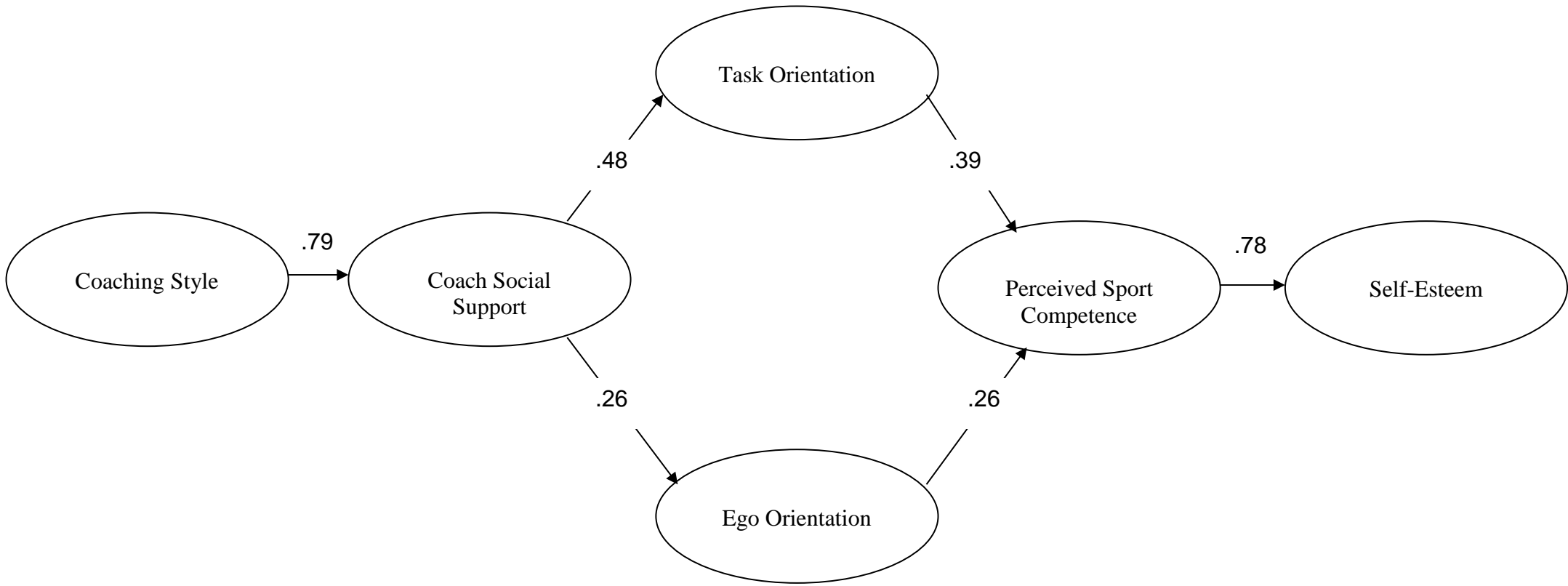
### **Model One: The Coach Model**

The proposed model was tested using the robust maximum likelihood estimation method due to Mardia's normalised estimate of multivariate kurtosis being relatively high (28.72), indicating non-normality in the data. This method ensured that overestimation of the  $\chi^2$  statistic was controlled for and adjusted for under identification of standard errors (Hu & Bentler, 1995). Within the model, the study variables were represented as latent variables. The six items measuring perceived autonomy supportive coaching style were used as indicators of this latent factor, and the four subscales of the PASS-Q were used as indicators of athletes' perceived social support made available by coaches. The six items measuring task orientation, the six items measuring ego orientation, the three items measuring perceived sport competence and the six items measuring self-esteem were used as indicators of the four latent factors representing internal asset development. Standardised factor loadings and uniqueness terms of the indicators used in the structural model are shown in Table 6.2.

Model fit indices revealed that the proposed model provided an acceptable fit: Satorra-Bentler  $\chi^2(428) = 713.30, p < .001$ ; CFI = .90; SRMR = .07; RMSEA = .05 (CI = .05-.06). As shown in Figure 6.3, athlete perceptions of an autonomy supportive coaching style were a strong positive predictor of the level of social support that athletes perceived coaches to make available. In turn, coach social support was a moderate to strong positive predictor of task orientation and a weak to moderate positive predictor of ego orientation. Task orientation was a moderate positive predictor of perceived sport competence and ego orientation was a weak positive predictor of perceived sport competence. Perceived sport competence was, in turn, a strong positive predictor of self-esteem. Significant indirect relationships were found between coaching style and both task ( $\beta = .38$ ) and ego ( $\beta = .21$ ) orientation in addition to perceived sport competence ( $\beta = .21$ ) and self-esteem ( $\beta = .16$ ). Further significant

**Table 6.2 Standardised factor loadings and uniqueness terms of all indicators in the structural equation model: Coach model**

<b>Latent Factor and Observed Indicators</b>	<b>Loading</b>	<b>Uniqueness</b>
Coach Autonomy Support		
Item 1	.79	.62
Item 2	.78	.62
Item 3	.63	.77
Item 4	.75	.66
Item 5	.81	.58
Item 6	.82	.57
Coach Social Support		
Item 1	.74	.68
Item 2	.95	.33
Item 3	.82	.57
Item 4	.69	.73
Task Orientation		
Item 1	.71	.70
Item 2	.61	.79
Item 3	.54	.84
Item 4	.58	.82
Item 5	.45	.89
Item 6	.68	.73
Ego Orientation		
Item 1	.76	.65
Item 2	.83	.55
Item 3	.80	.60
Item 4	.74	.67
Item 5	.82	.57
Item 6	.92	.40
Perceived Sport Competence		
Item 1	.77	.64
Item 2	.52	.86
Item 3	.79	.61
Self-Esteem		
Item 1	.72	.69
Item 2	.73	.68
Item 3	.49	.87
Item 4	.66	.75
Item 5	.72	.69
Item 6	.65	.76

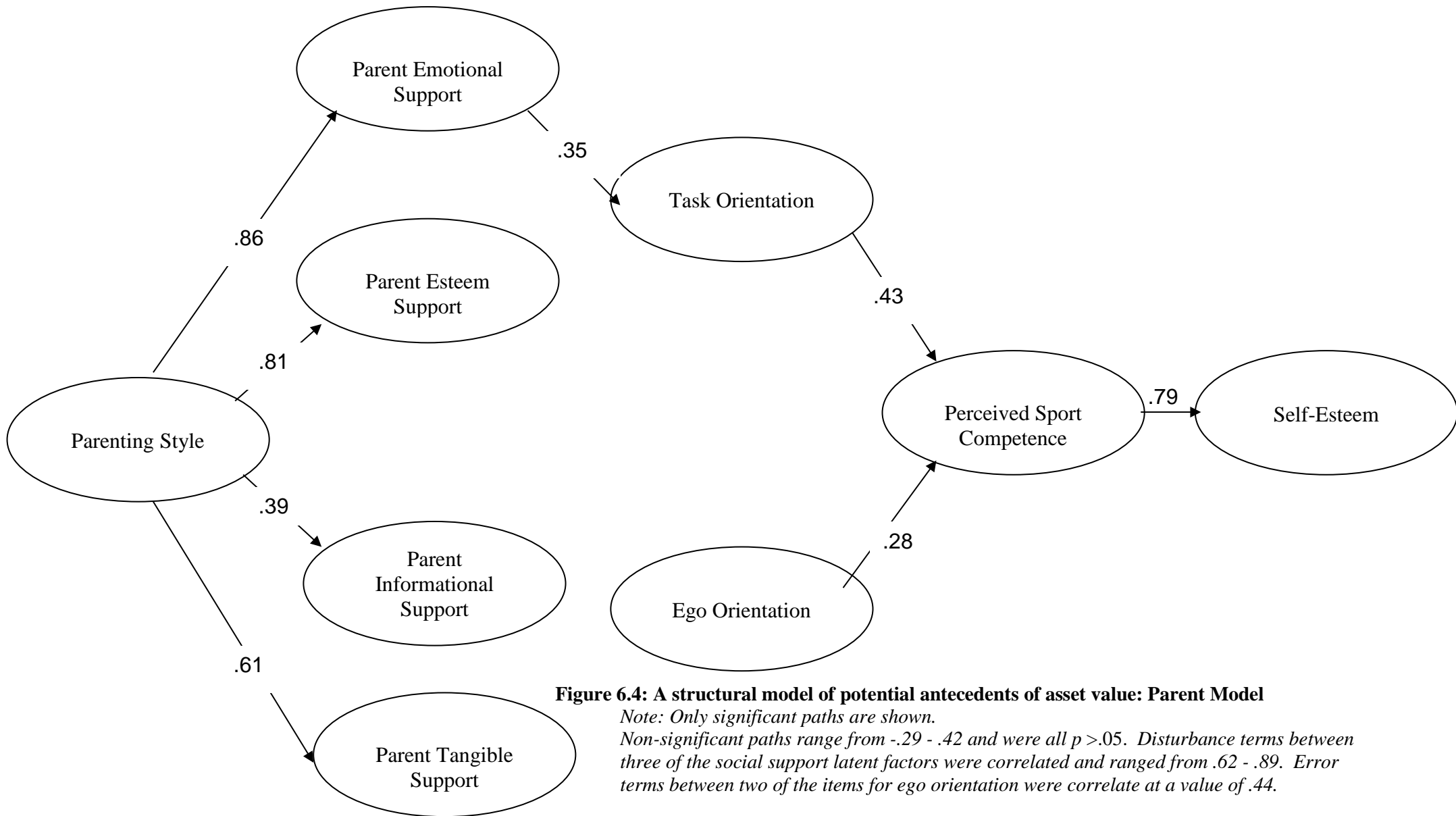


**Figure 6.3: A structural model of potential antecedents of asset value: Coach Model**

**Table 6.3 Standardised factor loadings and uniqueness terms of all indicators in the structural equation model: Parent model**

<b>Latent Factor and Observed Indicators</b>	<b>Loading</b>	<b>Uniqueness</b>
Parenting Style		
Item 1	.71	.71
Item 2	.68	.73
Item 3	.86	.52
Parent Emotional Support		
Item 1	.78	.60
Item 2	.80	.61
Item 3	.65	.76
Item 4	.77	.64
Esteem Support		
Item 1	.79	.62
Item 2	.76	.65
Item 3	.75	.66
Item 4	.73	.68
Informational Support		
Item 1	.84	.55
Item 2	.83	.56
Item 3	.74	.68
Item 4	.90	.43
Tangible Support		
Item 1	.50	.86
Item 2	.57	.82
Item 3	.66	.75
Item 4	.72	.70
Task Orientation		
Item 1	.69	.72
Item 2	.62	.78
Item 3	.53	.85
Item 4	.58	.82
Item 5	.47	.88
Item 6	.67	.74
Ego Orientation		
Item 1	.75	.67
Item 2	.80	.60
Item 3	.76	.66
Item 4	.76	.65
Item 5	.84	.55
Item 6	.94	.35
Perceived Sport Competence		
Item 1	.76	.65
Item 2	.51	.86
Item 3	.79	.61
Self-Esteem		
Item 1	.72	.69
Item 2	.73	.68
Item 3	.49	.87
Item 4	.66	.75
Item 5	.72	.69
Item 6	.65	.76





**Figure 6.4: A structural model of potential antecedents of asset value: Parent Model**

*Note: Only significant paths are shown.*

*Non-significant paths range from -.29 - .42 and were all  $p > .05$ . Disturbance terms between three of the social support latent factors were correlated and ranged from .62 - .89. Error terms between two of the items for ego orientation were correlate at a value of .44.*

indirect relationships between coach social support and both perceived sport competence ( $\beta = .26$ ) and self-esteem ( $\beta = .21$ ) were also found. Finally, both task and ego orientation acted indirectly and significantly on self-esteem ( $\beta = .31$  and  $\beta = .23$ , respectively). Coaching style accounted for 63% of the variance in social support provision which, in turn, accounted for 23% of the variance in task orientation and only 6% in ego orientation. However, goal orientation accounted for 26% of the variance in perceived sport competence which, in turn, accounted for 61% of the variance in self-esteem.

### **Model Two: The Parent Model**

Similar to the coach model, the parent model yielded a relatively high (25.79) Mardia's normalised estimate of multivariate kurtosis, indicating non-normality of the data; and, thus, appropriate adjustments were made as referred to by Hu and Bentler (1995). Within the model, the study variables were represented as latent variables. The three subscales of the POPS were used as indicators of the athlete perceptions of the latent factor of autonomy-supportive parenting style. The four items measuring emotional support, the four items measuring esteem support, the four items measuring informational support and the four items measuring tangible support were used as indicators of the four latent dimensions of social support made available by parents. The six items measuring task orientation, the six items measuring ego orientation, the three items measuring perceived sport competence and the six items measuring self-esteem were used as indicators of the four latent factors representing the selected internal assets. Standardised factor loadings and uniqueness terms of the indicators used in the structural model are shown in Table 6.3.

Model fit indices revealed that the proposed provided an acceptable fit: Satorra-Bentler  $\chi^2(721) = 1114.47, p < .001$ ; CFI = .90; SRMR = .08; RMSEA = .05 (CI = .04-.05). As shown in Figure 6.4, athlete perceptions of autonomy-supportive parenting style was a strong positive predictor of the levels of both emotional, esteem and tangible support and a moderate positive predictor of informational support. In turn, emotional support was a moderate positive predictor of task orientation which was a moderate to strong positive predictor of perceived sport competence. Ego orientation was also a weak positive predictor of perceived sport competence which was, in turn a strong positive predictor of self-esteem. Significant indirect relationships were found between parenting style and both task ( $\beta = .43$ ) and ego ( $\beta = .17$ ) orientation in addition to perceived sport competence ( $\beta = .23$ ) and self-esteem ( $\beta = .18$ ).

Further significant indirect relationships between emotional support and both perceived sport competence ( $\beta = .18$ ) and self-esteem ( $\beta = .14$ ) were found. Finally, both task and ego orientation acted indirectly and significantly on self-esteem ( $\beta = .34$  and  $\beta = .22$  respectively). Parenting style accounted for 74% of the variance in emotional support, 66% of the variance in esteem support, 15% of the variance in informational support, and 37% of the variance in tangible support. Social support, in turn, accounted for 24% of the variance in task orientation and only 7% in ego orientation. However, goal orientation accounted for 28% of the variance in perceived sport competence which, in turn, accounted for 62% of the variance in self-esteem.

### **Discussion**

The purpose of the present study was to test two models of potential antecedents of internal asset development, specifically, motivational goal orientations, perceived sport competence and self-esteem. The first model was a test of athlete perceptions of coach behaviours while the second model involved athlete perceptions of parental behaviours. The results suggest that athlete's perceptions of the most autonomy supportive coach and parenting styles displayed in sport will influence their perceptions of social support availability which, in turn, positively predicts the level of task and ego orientation, perceived sport competence and self-esteem. Consequently, these models advance the existing literature by providing empirical links between athlete-reported coach and/or parenting style, social support and the extent to which assets are evident. Whilst supportive interactions are commonly cited as being of utmost importance to the development of internal assets, this is the first study of its kind (to the author's knowledge) to look at social support as a definitive construct within this context and to make the links proposed within this study.

#### **Model One: The Coach Model**

In the current study, an autonomy supportive coaching style explained 66% of the variance in perceptions of available social support from the coach, thereby confirming our hypothesis. An autonomy supportive coaching style has long been suggested as the most favourable by Deci, Ryan, and colleagues (Deci & Ryan, 1985, 2000; Ryan & Deci, 2000, 2007) with a wealth of research illustrating the positive outcomes with which it is associated (e.g. Coatsworth & Conroy, 2009; Gillet, Vallerand, Amoura, & Baldes, 2010). However, within the context of positive youth development, this study is the first to make substantive links between one group of Benson's external assets (Benson et al., 1998; Leffert et al., 1998), namely

empowerment, and autonomy support. This finding provides an opportunity for researchers to further discuss and investigate the issue of autonomy-support more freely within the positive youth development literature.

Findings from the current study revealed that coach social support may influence the quality of achievement motivation reported by swimmers. Specifically, the provision of coach social support appears to impact on the way that an athlete views success and failure, namely through their levels of task and ego orientation. Research by Gould and colleagues (2012) found that the more a coach encouraged a task-involving (i.e., mastery) and caring climate, the greater the level of internal assets. However, the weak to moderate positive relationship of social support to ego orientation, bears some further attention as it suggests that informational, esteem and/or emotional support from a coach may assist in the development of ego orientation. Further, this study found a positive relationship between ego orientation and perceived sport competence and self-esteem, which supports prior research that has examined the relationships between these constructs (Biddle et al., 2003; Gould et al., 2012; Lau, et al., 2004). This finding also supports that by Gould et al. (2012) who found a positive relationship between ego orientation and positive YES-2 scores, thus indicating potentially beneficial elements of ego orientation. While acknowledging this, Gould and colleagues also found that the negative effects of an ego orientation far outweighed the positive and, hence, cautioned against encouraging coaches to develop a performance-oriented climate. Ego orientation is commonly referred to as a norm-referenced dispositional view of achievement. Consequently, coaches who provide information on an athlete's performance based on their position in a race or who provides esteem support by way of positive comparison of the athlete to others in the group might be promoting an ego-involving view of success. The specific criteria or valence of social support is not assessed in the PASS-Q beyond the four broad dimensions, therefore further research is required to understand this relationship and caution should be exercised with regard to the specific content of social support that is being provided.

Finally, the presentation of the model demonstrates that the way in which the assets are developed is not a linear process; rather the development of internal assets is a complex interaction between dispositions, external and internal assets. Indeed, Benson et al. (1998) note how "the growth of internal assets is a slower, more complex, and idiosyncratic process of self-regulation" (p.143). A social cognitive perspective of

self-regulation in youth sport (Petlichkoff, 2004) would suggest that children and young people become self-regulated learners through feedback they receive from both internal (self-referencing) and external sources (e.g., coaches, parents, peers). Research utilising Benson and colleagues' framework (1998) has consistently demonstrated the additive and hierarchical effects of developmental assets and this may assist in a staged approach to asset formation in sport. For example, the greater the number of developmental assets a young person displays the lesser the likelihood that they will participate in high risk behaviours (Benson et al., 1998) and the greater the chance that they will be successful at school, display leadership, take time to help others (Scales et al., 2000), and be more resilient in difficult situations (Leffert et al., 1998). Although the three assets in this study are closely related to each other, the model suggests that the assets are likely to develop in a way similar to that which has been suggested by Benson and colleagues (1998). That is, the internal assets may be develop in a staged and additive manner, and so more research investigating the interconnectedness of the relationships of the remaining 14 assets is required. The more that researchers understand how assets are situated within a sporting context and developed by athletes, the more likely it will be that those in control of education and talent development can establish focused approaches to enhance the training environment and further enable positive youth development within British swimming.

### **Model Two: The Parent Model**

The second model presented in this study was developed to test a similar model that emerged within the previous investigation focused on parental perceptions of their own behaviours. In the current study, an athlete's perceptions of autonomy-supportive parenting style and its relationship to perceptions of parental social support were assessed. The relationships between the dimensions of perceived social support and levels of internal assets were also tested in the same way as in the coach model. Results revealed that an autonomy-supportive parenting style was a strong positive predictor of emotional support, esteem support, and tangible support and a moderate positive predictor of informational support, accounting for 74%, 66%, 37% and 15% of the variance in the respective dimensions of social support. These results support our initial hypothesis in conjunction with the findings from Study Three and the coach model from the current study. However, only emotional support positively predicted achievement goal orientation, and then only the development of a task orientation, with a weak to moderate correlation explaining 24% of the variance. This finding could

reflect a variety of factors at play when considered within a sporting context, and suggests that more research needs to be conducted to fully understand the complexities of supporting young athletes. In sum, the findings suggest that the general parenting style that a parent exhibits may influence the support the athlete perceives to be available to them and this in turn may affect the levels of assets that athletes develop.

### **Implications and Future Directions**

There are a number of important contributions that can be highlighted from the current study, including support for previous research and novel insights that can be useful for coaches and parents with athletes who are situated in a competitive swimming context. In regard to the first point, this study supports findings of Holt et al. (2009) which emphasised the presence of an autonomy supportive parenting style in sport. Recognising that parents interact with their children across a variety of domains, it is also useful to bear in mind the powerful influences at play outside of the immediate sporting environment (e.g., during the car ride home from training or competition). Also, parents should be encouraged to provide high levels of emotional support to their children. Notably, emotional support – rather than esteem support – was found to predict task orientation for this population. This suggests that a parent’s role in the development of task and ego orientation - at least in this particular environment - may be greater than previously considered. It is well established within the motivational goal orientation literature that an individual’s definitions of success and failure are influenced by those of their significant others within sport (e.g., Ames, 1992; Nicholls, 1984, 1989). However, this suggests that, if a child feels cared and loved, then regardless of their results in the pool, they will be more likely to adopt a task orientation, arguably due to feeling confident and secure in their supportive relationship where they are not required to prove their superiority.

This study also helps us to understand the potential mechanisms of asset development by way of a unique approach not previously shown by other researchers. The use of existing measures from other domains of research replicate the approach suggested by Vierimaa et al. (2012) who proposed a battery of existing measures that could be used to measure Côté’s 4Cs of coaching expertise. Future research should continue to explore the social psychological mechanisms that may influence the development of the remaining assets identified in this thesis. Specifically, the models tested in this study should be replicated, and alternative internal assets could be considered to understand the unique relationships between each element of social

support and the remaining 14 assets. Considering the findings from Studies Two and Three within this thesis, it may be particularly pertinent to assess how coaches and parents influence the assets contained within the social skills and emotional competence groups. Further, a measure incorporating the complete 17-asset, five-group framework would be beneficial to further assess this particular collection of assets. Other future research suggestions include temporal evaluations of the extent to which the effects of style or support change for athletes. For example, research suggests that as athletes mature, parents become less influential whilst coaches become more influential and this shift is accompanied by a change in the requirement of certain types of support from both coach and parent (Côté, 1999; Côté et al., 2008). Therefore, future research should target the three predominant age groups in British swimming so that appropriate age-specific education can be provided. Longitudinal research is considered to be most pertinent in this regard as studies that track athletes over time are the only true means of assessing developmental milestones and the mechanisms contributing to these.

In addition, the models tested within this study assessed coach and parent influences collectively and irrespective of gender of either adult or swimmer. Further research that considers the dyadic relationship and the impact of gender on relational influences is required. For example, maternal and paternal parenting styles and provision of social support are thought to differ. Holt et al. (2009) found initial support for this idea and research considering the impact of differing styles on male and female swimmers is pertinent. There are a number of different levels at which this research could operate but a fundamental aim would be to understand which relational grouping is most adaptive for development (e.g. father-son; father-daughter; mother-son; mother-daughter) and if these relationships also change as the athlete grows and matures.

Finally, with the change in societal family dynamics that have been evident over the last few decades, a greater appreciation of the impact of an increasing female population in the workforce, a higher divorce rate, more single parent families and an increase in the *blended family* (in which a child or children, their parent and another stepparent blend children from two families into a new family system), is important.

### **Concluding Thoughts**

There were some limitations to this research, including aspects related to measurement. First, a large number of items had to be removed from the POPS before a satisfactory fit was found, and Cronbach's alpha measure of internal reliability was still low on the involvement subscale. Second, the POPS and PASS-Q were both designed for slightly

older age groups, possibly a cause of the issue of multicollinearity in the coach model. In addition, the size of the model in comparison to the sample size did not allow us to assess the relationships between each dimension of parenting style (i.e., warmth, involvement, autonomy-support) and social support. Therefore, further research is required to better identify the elements of an autonomy-supportive parenting style that are most preferable for optimal psychosocial development of youth in this context.

In conclusion, this final study advances our understanding of how we can conceptualise and study the supportive element that has been purported to be so critical to positive youth development. Furthermore, it provides empirical evidence to illustrate a potential mechanism of asset development and, as such, goes some way to answering the call from Gould and Carson (2010) to provide more information on the specific behaviours that coaches, and indeed parents, should aim to provide in order to enhance positive youth development.





# Chapter Seven

## General Discussion

This chapter provides a summary and discussion of the findings that arise from the four studies conducted within the thesis. First, a summary of the four studies and their main findings are presented. This is followed by a discussion around the contribution of these findings to our knowledge of coach and parent influences on psychosocial assets in youth swimming. The limitations of the research presented within this thesis and a number of suggestions for future research are also discussed, including applied implications and recommendations to practitioners and national governing bodies of sport.

The aim of the present thesis, comprised of four distinct studies, was to understand how a positive youth development approach might be applied to and integrated within the performance environment of British swimming. The journey of this thesis began with the premise that the growing body of research in positive youth development has an important contribution to make in competitive sport and that coaches and parents are central to this process. Key to this premise is the necessity of translating the literature in such a way that we can increase accessibility of language and concepts for coaches and parents, who are such key influencers in young athletes' lives. Thus, this thesis centres around a proposed framework of 17 psychosocial assets and their higher order groups as developed within the first study. Subsequent studies used the proposed framework as a platform, and focused on the assessment of coaches' (Study Two) and then parents' (Study Three) perceptions of these assets. The progression of this research reflected an ongoing iterative process, and an understanding of the complexities of youth sporting environments. Therefore, Study Three was an extension of Studies One and Two, and thus included testing of a proposed model in which parental perceptions of most salient parenting styles (i.e., autonomy support, involvement, warmth) was found to be linked to their perceptions of the social support they made available to their children. In turn, this link was found to positively predict all of the higher order asset groups aside from self-perceptions. The aim of the fourth and final study of the thesis was to retest the model in Study Three, but consider it from an athlete's viewpoint, evaluating the influence of the coach and then the parenting style on three internal assets from the emergent psychosocial framework; i.e., motivational orientation, perceived sport competence and self-esteem.

## **Study One: Positive Youth Development in Swimming: Clarification and Consensus of Key Psychosocial Assets**

The primary aim of this study was to establish a contextually specific set of internal assets that experts could agree were important for both personal development to life outside swimming and relevant to swimming performance. Assets were intended to encompass the complete requirements of individuals with the inclusion of assets from the positive youth development, life skills and performance enhancement literature. A further objective was to increase accessibility to the area for coaches and parents by selecting asset names and definitions that were easily understood and by using language that was more commonplace with a swimming environment. The study was completed over two stages. The first comprised a content analysis of key papers to develop a comprehensive list of internal assets associated with positive youth development, life skills research and performance enhancement. For the second stage of the study, a panel of ten experts were recruited and asked to comment upon the list of assets, the way in which they had been grouped, the chosen overall asset names and the definitions that they had been given. The expert panel was made up of four swim coaches, with practitioners and youth sport scholars comprising the remaining panel members. Five higher order categories containing 17 individual assets emerged. These were self-perceptions, behavioural skills, approach characteristics, social skills and emotional competence. Participants discussed the relevance and utility of the assets within swimming, commenting upon the need for more accessible language and the usefulness of the resultant asset list as a definitive list of assets for them to focus on developing within their swimmers. This study was of primary importance for the thesis as a whole, as the remaining studies - particularly Studies Two and Three - utilised the assets within the framework to further understanding of coach and parent attitudes to and perceptions of positive youth development in swimming.

## **Study Two: Coach Attitudes Towards and Perceptions of Positive Youth Development in Swimming**

The objective for Study Two was to establish a greater understanding of coach perceptions of the list of assets considered important for positive youth development in swimming, generated within the first study. As a key stakeholder in development, it was also considered important to ascertain if particular characteristics of coaches resulted in them placing greater or lesser value on the assets. A bespoke quantitative survey was designed for the purpose of the study and was completed by 181 British

swimming coaches. Coaches were asked to rate the degree to which they considered each of the assets (1) important for the personal development of the athletes, (2) relevant to successful swimming performance, (3) a part of their role as a coach to develop each asset and (4) in terms of the amount of attention that they currently gave to their development through both structured and unstructured activities. Analyses were conducted on a number of levels and revealed motivation to be, overall, the most valued asset and empathy to be the least. Results also revealed significant differences for all assets between the levels of importance, relevance and role and the amount of attention that the coaches reported currently ascribing to these assets. The five-factor higher order model that emerged from the first study was quantitatively tested and supported and differences between the asset groups were also analysed. Somewhat mirroring the individual asset results, the overall asset groups of approach characteristics and emotional competence were most and least valued, respectively, and assets within self-perceptions and behavioural skills groups were also valued to a greater degree than those within the social skills group. Coach characteristics were also examined regarding coaches' overall value of the assets and revealed that full-time, paid coaches provided higher value ratings for all asset groups compared to part-time, volunteer coaches, suggesting varying needs for these two groups of coaches in terms of education and support to implement positive youth development initiatives.

### **Study Three: Parental Perceptions of and Influences on Positive Youth Development in Swimming**

Two distinct purposes underpinned the third study of this thesis. The first was to replicate Study Two within a parent sample to ascertain the existing level of value that parents placed on the 17 psychosocial assets identified in this thesis, and to test the structural integrity of the five factor model within the sport parent population. The second purpose was to assess the constructs of parenting style and perceived social support provision as potential antecedents of parental asset value. Grolnick's (2003) typology of parenting style, involving the three dimensions of autonomy-support, involvement and warmth, was adopted after Holt et al. (2009) presented comprehensive findings documenting the prevalence of autonomy-supportive parenting in sport. Participants ( $n = 249$ ) completed a short questionnaire comprised of the asset related survey used in the previous study; the Perceptions of Success (POPS; Robbins, 1994) and the Perceived Social Support in Sport Questionnaire (PASS-Q; Freeman et al., 2011). As with the previous study, a number of analyses were conducted in order to

gain a full picture of the parental asset value profile. Results from this section of the study were similar to those of the previous study with the more intrapersonal assets of self-perceptions, behavioural skills and approach characteristics valued more than the interpersonal assets contained within the social and emotional asset groups. In the second phase of analysis, structural equation modelling was used to examine the proposed model and revealed positive significant relationships between parental perceptions of their parenting style and their perceptions of the social support they made available which, in turn, positively predicted the value they placed on the assets. Specifically, parents who reported high levels of esteem support placed greater value on all assets apart from self-perceptions and parents who reported a warm style were more likely to provide this esteem support. Therefore, by encouraging greater provision of esteem support we could hope to increase parental value on the assets and, specifically on the social and emotional assets. As with the previous study, findings support the need to develop bespoke programs that include targeted education for parents regarding preferred approaches for interacting with their child-athletes in regard to their sport. This is considered particularly pertinent given that parents have increased opportunities to influence psychosocial development as they interact with their child-athlete across a variety of domains.

#### **Study Four: Investigating the links between Perceived Coaching and Parenting Style, Social Support Availability and Psychosocial Development**

The final study of this thesis focused on athlete perceptions of parents and coaches as external assets to positive youth development. Designed to test two proposed models of the potential antecedents of asset level (one coach-related and one parent-related), 246 British swimmers of mixed age, ability and competitive level were recruited. Participants completed the Perceptions of Success (POPS; Robbins, 1994) and the Perceived Social Support in Sport Questionnaire (PASS-Q; Freeman et al., 2011) on two occasions (one for the coach and one for the parent.), and the Sport Climate Questionnaire (SCQ) in addition to the Achievement Goal Scale for Youth Sports (Cumming, et al., 2008), a three-item perceived sport competence scale and a six-item self-esteem measure. Structural equation modelling revealed acceptable model fits for both models and revealed that autonomy supportive coach and parenting styles both positively predicted respective perceptions of social support availability. Athletes also reported that coach social support positively predicted both task and ego orientation, while parental emotional support positively predicted task orientation only. Both task

and ego orientation positively predicted perceived sport competence which, in turn, positively predicted self-esteem. Results from this study supported the links suggested in the previous study between the provision of autonomy support, the provision of social support in swimming and the level of or value towards the internal asset. Further exploration of this model with differing assets is required to understand what assets are affected in this way, in addition to how and why. These results illustrate the additional importance of emotional support for internal asset development, hence suggesting the inclusion of this element within any educational material or interventions. Furthermore, autonomy-supportive coaching style was found to be indicative of high levels of social support and was, therefore, positively related to asset level while an autonomy-supportive parenting style characterised by high levels of autonomy support, involvement and warmth was a positive predictor of all dimensions of support illustrating the important role of both autonomy and support in positive youth development. This study advances our understanding of how we can conceptualise and study the supportive element that has been purported to be so critical to positive youth development. Furthermore, it provides empirical evidence to illustrate a potential mechanism of asset development and, as such, goes some way to answering the call from Gould and Carson (2010) to provide more information on the specific behaviours that coaches, and indeed parents, should aim to provide in order to enhance positive youth development.

### **Coach and Parent as External Assets of Positive Youth Development**

While each of the aforementioned studies contribute to the positive youth development literature within their own right, perhaps one of the most significant contributions of this thesis is the greater understanding that is achieved when these studies are examined as one larger study of positive youth development in swimming. A primary objective for both Studies Two and Three was to gather an overview of the value that coaches and parents attach to the particular internal assets with regard to positive youth development in swimming, as developed within the first study of this thesis. A bespoke survey was used to gather this information and administered to participants within both studies. Results of the two separate studies showed that coaches and parents both placed greater value on the more intrapersonal assets that were contained within the self-perceptions, approach characteristics and behavioural skills groups. The assets contained within the social skills and emotional competence groups appeared to receive lesser value. However, in order to understand which group

of individuals may have the greatest utility in providing external assets to assist with the development of *all* assets contained within the framework, a comparison between the two is appropriate. Further analyses were conducted (please see Appendix 10 for details) and parents were found to place significantly greater value than coaches on the majority of the assets. Perhaps unsurprisingly, the assets that are more obviously required within a sporting environment were valued to the same degree by both parties (i.e., self-appraisal, communication, positive attitude, perceived sport competence, discipline and motivation). Further analysis to compare differences between the amount of attention provided to developing the asset by both parties once again revealed the parent to be the most significant source of attention from perceived sport competence, discipline, positive attitude and motivation. These additional analyses do add further to our understanding of the complex nature of sporting environments. Where Studies Two and Three both generated essential insight into the specific cognitions and behaviours of each individual group, it is only by comparing the two sources of external assets that we can fully appreciate the sport climate that exists for athlete experience and development. While all value scores are high, these specific results indicate that the parent may be most valuable to the athlete as they attach greater value to the assets and allocate more time to their development than the coaches. Further strength can be added to that argument if we compare athlete perceptions of available support from coach and parent. Upon conducting this analysis (see Appendix 10 for the specific analysis) we see that athletes reported perceiving significantly greater levels of emotional, esteem and tangible support from parents compared to coaches, whilst the opposite was true for informational support. Therefore, parents appear to both value the assets to a greater degree than coaches and to provide more support in three of the four key areas than coaches. However, whilst interesting, what these additional analyses cannot tell us is to what degree the athletes actually take up, request or need this increased parental support. Indeed, parents reported significantly higher levels of involvement, warmth, emotional support and esteem support than athletes, suggesting an overestimation by parents of these elements with regard to their interactions with their children. This suggests that parents may over-inflate their role compared to what the swimmers, require, request and indeed perceive. Parents therefore do appear to be the greatest contributor to developmental opportunities, providing a more prominent developmental climate than coaches. This appears to be in

contrast to prior research which notes declining parental involvement as athletes grow and mature within sport (e.g., Bloom, 1985; Wyllemann & Lavallee, 2004).

Furthermore, of interest to note is the different types of social support that appear pertinent for each. Whilst esteem support predicts the degree of asset value indicated by the parent, it is emotional support that athletes perceives that predicts task orientation directly and both perceived sport competence and self-esteem indirectly. These results therefore suggest the increased importance of these particular dimensions of support, and further investigation into the specific nature of these support dimensions would be appropriate. For example, what specific behaviours are deemed meaningful by athletes and how exactly do they impact upon the internal assets? Such knowledge would assist with the development of educational resources for parents, as suggested by Camiré et al. (2009a).

A greater appreciation of the parent-child dyad would clearly add significantly to our understanding of the contribution of this unique relationship to positive youth development within sport, however, a familial focus brings with it a number of other important considerations. In the developing world, our understanding of what constitutes a family is ever changing and evolving. In Western societies such as the USA and the UK, where social change was extensive in the second half of the twentieth century, families are much more dynamic and varied than ever before. Whereas the traditional nuclear family of spouses and their biological or adoptive children remain extant, cohabitation and the birth of children within a committed hetero or homosexual relationship are now much more commonplace and socially acceptable. In addition to this, an increasing female population in the workforce, a higher divorce rate, more single parent families and an increase in the *blended family* (in which a child or children, their parent and another stepparent blend children from two families into a new family system), means that there are consequences on the dynamic and interactive nature of families on development (Shaffer, 2002). Research into the influence of single parent families, for example, is but one avenue that requires much more exploration.

### **Limitations and Future Research Directions**

The limitations that are specific to each of the empirical studies presented in this thesis have already been discussed within each chapter. Although attempts to minimise the limitations of this thesis were made, a number of potential weaknesses are apparent and require further discussion as a whole. These limitations will be used to inform the future research directions in order to suggest ways to extend and advance the research



contained within this thesis. First, the research process as a whole relied almost exclusively upon self-report instruments. Whilst the use of self-report questionnaires facilitated investigations of sport-specific, representative samples of coaches, parents and swimmers, a number of limitations remain. First, within Studies Two and Three, coaches and parents may have responded in a socially desirable manner regarding their perceptions of the ‘appropriate’ levels of importance, relevance and role. They may also have struggled to accurately assess the amount of attention that they currently give to developing the assets in their coaching and parenting activities. Therefore, future research in this area should aim to include observations of the specific behaviours (positive and negative) that coaches display within their everyday coaching activities. These examples could consequently be used to inform the development of interventions and educational material providing coaches with meaningful examples of positive and negative athlete interactions. Smith, Smoll and Hunt (1977) developed the Coaching Behaviour Assessment System for just such a purpose, and this could be adapted for use by researchers examining the developmental issues central to this thesis.

A second limitation of the research contained within this thesis is its cross-sectional nature; thus, it is not possible to establish causal relationships, instead only associations between constructs. Whilst all four studies were theoretically driven, a longitudinal design would allow measurement of asset development over time as opposed to asset level, and may provide a more appropriate means through which to consider the testing and development of the models proposed and tested within Study Four of this thesis. A longitudinal design would also allow for tracking of athletes over time to ascertain if, how and when potential assets develop, which is an approach that may be more appropriate for future research in this area. For example, Benson et al. (1998) note how “the growth of internal assets is a slower, more complex, and idiosyncratic process of self-regulation” (p.143) and research utilising Benson and colleagues’ framework (1998) has consistently demonstrated the additive and hierarchical effects of developmental assets. However, the holistic question of ‘which assets, when, and primarily shaped by whom?’ remains pivotal and largely unexplored in sport [to the authors knowledge] from an empirical standpoint. The broad categories in this thesis may reflect the types of skills and behaviours that are necessary for swimmers to develop during the course of their athletic careers, however, the order in which these assets should be prioritized remains open to debate and further research, for which a longitudinal design would be most relevant.

A final limitation that needs to be addressed is the factorial validity and internal reliability of the POPS. In their extensive and formative qualitative study of parenting styles, Holt and colleagues (2009) confirmed an autonomy-supportive parenting style characterised by high levels of involvement as a salient style within sport. The POPS is, to date, the only instrument that allows measurement of the autonomy support dimension; hence it was the obvious choice of measure to use to progress research in this area. Nevertheless, significant modifications to the original measure were required within both studies, with only 10 out of the original 21 items retained across the three subscales after the CFA. Cronbach's alpha coefficients were low on the involvement subscale within both the parent and athlete studies, however, the removal of so many items had left a much smaller subscale and so inter-item means were provided with all subscales achieving the critical value for this marker. Encouragingly, both studies returned acceptable CFA's using the same items, suggesting a short-form of the questionnaire is relevant and valid; however, in view of these modifications, a specific validation study may be prudent before continued work with this instrument in order to refine the measure for use with youth sport populations. This may be particularly important given Camiré et al.'s (2009a) call for increased attention on the effect of parental support on the development of life skills.

Indeed, the explorative nature of the research in this area results in a number of potential investigative directions. The comparative analysis between Studies Three and Four in this discussion highlights the opportunity for a dyadic approach within future research designs. Bronfenbrenner and Morris (1998) discuss the need to consider reciprocal influences that occur in relationships whereby the way in which one individual behaves within a given relationship is influenced by the behaviour of the other, a phenomenon that is currently not possible to capture with the current cross-sectional nature of this research. Relationship researchers outside of sport (Bersheid, 1999; Kenny, 1995, 1996) and within the domain of sport (Lorimer & Jowett, 2009; Poczwardowski, Barott, & Jowett, 2006) have advocated for future researchers to shift their focus away from the individual as a unit of analysis to taking a dyadic approach to their research, whereby both parties (e.g., coach and athlete; parent and athlete) are considered as a unit. An extension to this thesis could be to undertake a dyadic analysis of the relational impact on development, thereby adding another level to our understanding and assessing if congruence between adult and athlete perceptions of support and style results in increases in asset level. An additional caveat of this thesis is

the lack of coach perspective on their own coaching style and of the social support that they provide. A dyadic approach would require an assessment of coach perspectives of their own coaching style and support, hence adding to the research contained within this thesis. The same could be said for gaining athlete perspectives of the importance and relevance of the 17 asset framework proposed within this thesis. Whilst the models of positive youth development are based on adult perceptions of development in which emphasis is placed on the importance of adults creating a structured environment for development (e.g., Brunelle, Danish, & Forneris, 2007; Danish et al., 2005), future studies should consider athlete perceptions from quantitative and qualitative perspectives, to gain their overall appraisal of these psychosocial assets as relevant needs during adolescence and young adulthood (Jones et al., 2011).

Finally, one additional socialising agent that has not been considered throughout these discussions is the athlete's peer group. Studied even less frequently than parents by sport psychology researchers (Smith, 2003), an athlete's peer group has been found to significantly influence the developmental impact of youth sport participation (Carr, 2012). However, within the context of this thesis, an athlete's peer group could influence the development of the assets contained within the social skills group. Conflict resolution, for example, can be developed through a child's desire to play and the resultant negotiation and compromise of rules and behaviours acceptable to both sides (Gray, 2014). Through play, children experience a wide range of experiences that assist in the development of the internal psychosocial assets. For example, emotional self-regulation is practised when children attempt to control their anger when accidentally hurt by another in a play-fight and empathy is demonstrated through sociodramatic play in which children pretend to be someone or something else and must assume that character (Gray, 2014). In sport, peer influences have been linked to such outcomes as physical self-perceptions, enjoyment, intrinsic motivation and activity choice (Weiss & Stuntz, 2004). The Sport Friendship Quality Scale (SFQS; Weiss & Smith, 1999) has been developed to capture six key elements of peer relationships in sport including companionship, emotional support, loyalty and intimacy, similarity, conflict resolution and experiences of conflict, illustrating the important influences that peer interactions may have on development, including acting as an additional source of social support. The addition of this third socialising agent thus expands the potential research questions exponentially and serves to illustrate the infancy of positive youth development research.

## **Applied Implications**

Throughout this thesis, applied implications have been presented within each chapter and relevant to the specific findings of each study. However, an overall discussion of the meaningful contribution that the thesis, as a complete body of work, adds to applied practice within British swimming is necessary. This thesis set out to understand how a positive youth development approach might be applied to and integrated within the performance environment of British swimming. Four key aims were identified to meet this larger objective, the first of which was to establish the key internal assets necessary for young swimmers to obtain through their development in the sport. The first study of this thesis was designed to address the first aim, with the development of the 17 internal assets presented therein. The purpose of Study One was to definitively present a comprehensive yet comprehensible list of assets to coaches, applied practitioners and parents that would be useful in guiding the psychosocial development of their young swimmers. A key part of the process was the addition of definitions that were easily understood and accessible to all, no matter their educational background or level of coaching experience. There was support for this objective having been achieved, as coaches discussed the various ways that they could utilise the list of assets within their coaching practice.

Yet, the identification and agreement of a salient group of psychosocial assets for swimming was only the first step in fulfilling the overall objective of the thesis. As key socialising agents and providers of external assets, it was important to gain an understanding of coach and parent perceptions of these assets. Studies Two and Three were therefore developed and provided insight into what assets were valued to a greater degree than others. The assets within the social skills and emotional competence groups emerged as least valued among both groups. The importance and relevance of these assets has been discussed within each chapter; however, it is also important to consider why these assets might be valued to a lower degree, particularly given that the value scores were not low, but they were lower than the other assets. One potential argument is the socialising influence of the sport itself on the value attributed to different assets. Baker et al. (2009) suggest that early specialisation, as is commonplace within swimming, can result in compromised social development through limited development of social skills. Nevertheless, the structure and set-up of the swimming environment may further contribute to the lower value placed on social skills and emotional competence. The way in which the sport is practised does not easily allow

for the development of social skills, or provide obvious examples of occasions in which the swimmer is required to utilise such skills. Yet, personal responsibility (Gould et al., 2006), the ability to both provide and receive feedback, develop effective working relationships with teammates, parents, coaches and support staff and the ability to collaborate with coaches on training and performance issues are all skills required of the elite senior athlete (Côté et al., 2010; Côté & Hay, 2002; Gould et al., 2006; Gould et al., 2009). Therefore, from a performance perspective alone, there is a need to develop these assets within our young swimmers to assist in their successful transition from youth to elite sport (MacNamara et al., 2010). Yet, as noted by Smoll, Cumming, and Smith (2011),

Youth sports provide an educational medium for the development of desirable physical and psychosocial characteristics. The sport environment is viewed as a microcosm of society in which children and youth can learn to cope with realities they will face in later life. Thus, athletics provides a developmental setting within which an *educational process* can occur...Most of the negative consequences of youth sports occur when adults erroneously impose a professional model on what should be a recreational and educational experience for youngsters...when excessive emphasis is placed on winning, it is easy to lose sight of the needs and interests of the young athlete (p.14).

Consequently, the focus should not simply be on developing champions but on developing well rounded individuals whose experience in sport will help them to develop Lerner and colleagues' (2000) sixth C of contribution, i.e., to give back to their community and to display the assets developed in other domains such as education, work and personal relationships. Therefore, national governing bodies of sport have a duty of care to attend to the development of these assets in their athletes in order to prepare these individuals for transition out of sport without being jaded by their sport experience. A positive experience for all must surely be the objective for sport planners and national governing bodies, with the performance benefits from the development of these assets as a secondary advantage. However, researchers must also consider other reasons that may be impacting on the lower levels of value and attention attached to particular assets and an appreciation of the barriers to internal asset development that coaches experience may provide an additional element to our understanding. Within the second study of this thesis, coaches, and particularly volunteer coaches, appeared to experience time constraints that impacted upon the value and attention directed towards

all assets. Related to this, a greater appreciation of the specific educational background of coaches and the impact that this has on asset value and attention would allow a more focused approach to programmes of continued professional development (CPD) resulting in both more appropriate allocation of resources and better advice for those looking to enter the coaching profession.

### **Concluding Remarks**

The research contained within this thesis aimed to provide an overview of positive youth development in swimming in Britain by developing a preliminary understanding of the influences of key socialising agents (i.e., parents and coaches) on salient psychosocial characteristics. The findings offer national governing bodies of sport, coaches and parents a framework of psychosocial assets to consider when young people engage in the sport. In the context of pursuing positive youth development outcomes through swimming, coaches and parents value a range of internal assets, yet attach greater value to intrapersonal and behavioural skills than interpersonal (i.e., social) and emotional skills in swimmers. Whilst discrepancies in reported behavioural attention given towards these assets is an important direction of study for future research, the results of the thesis do reinforce the importance of autonomy supportive coach and parenting style, and the provision of social support to swimmers. In conclusion, the studies in this thesis reinforce the important roles that coaches and parents play as external assets in empowering and supporting youth swimmers to potentially enhanced developmental outcomes through their competitive participation. Lastly, I hope that you have found this thesis as interesting, insightful and enjoyable to read as I did to write it and I hope I have managed to maintain the objectivity combined with close compassion and understanding for which I strived.



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# Appendix 1

Assets, Definitions and Groupings: Study 1

Asset	Literature Definition	Working Definition	Cited by
<b>Perceived Sport Competence</b>	<p>Positive view of one's actions in domain specific areas including social, academic, cognitive and vocational (Lerner's 5Cs)</p> <p>Youths' beliefs about their capability or skill in sport and physical activity (Weiss, 2007, p.436)</p>	One's positive beliefs about capability or skill in swimming	<ul style="list-style-type: none"> <li>• Weiss (2008)<sup>1</sup></li> <li>• Lerner's 5Cs<sup>2</sup></li> <li>• Côté &amp; Fraser-Thomas (2007)<sup>3</sup></li> <li>• Weiss (1991)<sup>4</sup></li> </ul>
Self Efficacy	<p>Judgements of how well one can execute courses of action required to deal with prospective situations (Bandura, 1982, p.122)</p> <p>The perception that one can achieve desired goals through one's own actions (Catalano <i>et al</i>, 2004, p.106)</p>		<ul style="list-style-type: none"> <li>• Gould <i>et al</i> (2007)<sup>5</sup></li> <li>• Petitpas <i>et al</i> (2004)<sup>6</sup></li> <li>• Catalano <i>et al</i> (2004)<sup>7</sup></li> <li>• Camiré <i>et al</i> (2009)<sup>8</sup></li> </ul>
Self Concept	One's general perception of the self in given domains of functioning (Marsh & Perry, 2005, p.72)		<ul style="list-style-type: none"> <li>• Hedstrom &amp; Gould (2004)<sup>9</sup></li> <li>• Danish &amp; Nellen (1997)<sup>10</sup></li> </ul>
Sport Confidence			<ul style="list-style-type: none"> <li>• Gould <i>et al</i> (2002)<sup>12</sup></li> </ul>
<b>Self Esteem</b>	<p>One's generalised sense of self-worth (Smoll <i>et al</i>, 1993, p.602)</p> <p>The individual's positive or negative attitude toward the self as a totality (Rosenberg <i>et al</i>, 1995, p.141)</p>	One's overall general belief in self and ability	<ul style="list-style-type: none"> <li>• Benson's 40 assets<sup>13</sup></li> <li>• Smith <i>et al</i> (1979)<sup>14</sup></li> <li>• Smoll <i>et al</i> (1993)<sup>15</sup></li> <li>• Hedstrom &amp; Gould (2004)<sup>9</sup></li> <li>• Petitpas <i>et al</i> (2004)<sup>6</sup></li> <li>• Côté (2002)<sup>16</sup></li> </ul>

			<ul style="list-style-type: none"> <li>• Côté &amp; Fraser-Thomas (2007)<sup>3</sup></li> <li>• Holt &amp; Sehn (2008)<sup>17</sup></li> <li>• Gould &amp; Carson (2008)<sup>18</sup></li> <li>• Petitpas <i>et al</i> (2005)<sup>19</sup></li> </ul>
Confidence	<p>An internal sense of overall positive self-worth and self-efficacy; one's global self-regard, as opposed to domain specific beliefs (Lerner's 5Cs)</p> <p>Full involvement, no fear of mistakes, positive physical and psychological presence, accepts challenging goals and internalises accomplishments (Harwood, 2008, p.119)</p>		<ul style="list-style-type: none"> <li>• Weiss (2008)<sup>1</sup></li> <li>• Lerner's 5Cs<sup>2</sup></li> <li>• SUPER (Brunelle <i>et al</i>, 2007)<sup>20</sup></li> <li>• Gould <i>et al</i> (2007)<sup>5</sup></li> <li>• Danish &amp; Nellen (1997)<sup>10</sup></li> <li>• Harwood (2008)<sup>21</sup></li> <li>• Camiré <i>et al</i> (2009)<sup>8</sup></li> <li>• Côté (2002)<sup>16</sup></li> <li>• Hedstrom &amp; Gould (2004)<sup>9</sup></li> <li>• Gould <i>et al</i> (2002)<sup>12</sup></li> <li>• Petitpas <i>et al</i> (2005)<sup>19</sup></li> <li>• Holt &amp; Dunn (2004)<sup>22</sup></li> </ul>
Courage	Grouped with confidence in SUPER and the overall definition is believing in themselves (Brunelle <i>et al</i> , 2007, p.45)		<ul style="list-style-type: none"> <li>• Papacharsis <i>et al</i> (2005)<sup>23</sup></li> <li>• SUPER (Brunelle <i>et al</i>, 2007)<sup>20</sup></li> </ul>
Self Perceptions	Part of general development and not context specific e.g. perceived competence; self esteem (Weiss, 1991, p.339) – more an overarching category of assets one and 2 I guess		<ul style="list-style-type: none"> <li>• Weiss (1991)<sup>4</sup></li> </ul>
<b>Initiative</b>	The concept of initiative...involves learning to set realistic goals, learning to manage time, and taking responsibility for oneself (Holt <i>et al</i> , 2008)	One's ability to set realistic goals, manage time and take responsibility for oneself	<ul style="list-style-type: none"> <li>• Côté &amp; Fraser-Thomas (2007)<sup>3</sup></li> <li>• Holt <i>et al</i> (2008)<sup>24</sup></li> <li>• Holt &amp; Sehn (2008)<sup>17</sup></li> <li>• Dworkin <i>et al</i> (2003)<sup>25</sup></li> </ul>

	<p>Learning to set and work towards goals (Holt, 2008, p.27)</p> <p>Dworkin <i>et al</i> (2003) – learning to set realistic goals, learning to manage time and taking responsibility for oneself (p.21 and 22)</p>		<ul style="list-style-type: none"> <li>• Holt &amp; Jones (2008)<sup>26</sup></li> <li>• Larson <i>et al</i> (2006)<sup>27</sup></li> <li>• Petitpas <i>et al</i> (2005)<sup>19</sup></li> <li>• Hansen <i>et al</i> (2003)<sup>28</sup></li> </ul>
Goal setting	<p>Learning to set realistic goals Dworkin <i>et al</i>, 2003, p.21)</p> <p>To strategically plan...development in order to maximise...career progress (Holt &amp; Dunn, 2004, p,209)</p>		<ul style="list-style-type: none"> <li>• Jones &amp; Lavallee (2009)<sup>29</sup></li> <li>• Hansen &amp; Larson (2005)<sup>30</sup></li> <li>• Hokowhitu Program<sup>33</sup></li> <li>• Gould &amp; Carson (2008)<sup>18</sup></li> <li>• Petitpas <i>et al</i> (2005)<sup>19</sup></li> <li>• Danish &amp; Nellen (1997)<sup>10</sup></li> <li>• Papacharsis <i>et al</i> (2005)<sup>23</sup></li> <li>• SUPER (Brunelle <i>et al</i>, 2007)<sup>20</sup></li> <li>• Côté (2002)<sup>16</sup></li> <li>• Weiss (1991)<sup>4</sup></li> <li>• Holt &amp; Dunn (2004)<sup>22</sup></li> <li>• Dworkin <i>et al</i> (2003)<sup>25</sup></li> <li>• Holt &amp; Sehn (2008)<sup>17</sup></li> <li>• Holt &amp; Jones (2008)<sup>26</sup></li> <li>• Larson <i>et al</i> (2006)<sup>27</sup></li> <li>• Hedstrom &amp; Gould (2004)<sup>9</sup></li> <li>• Gould <i>et al</i> (2002)<sup>12</sup></li> <li>• Catalano <i>et al</i> (2004)<sup>7</sup></li> <li>• Hansen <i>et al</i> (2003)<sup>28</sup></li> </ul>
Ambitions	A psychosocial factor associated with athletic success		<ul style="list-style-type: none"> <li>• Holt &amp; Morely (2004)<sup>32</sup></li> </ul>
Time management	Learn to manage their different obligations (Camiré <i>et al</i> , 2009,		<ul style="list-style-type: none"> <li>• Hansen &amp; Larson (2005)<sup>30</sup></li> <li>• Gould <i>et al</i> (2007)<sup>5</sup></li> </ul>

	p.81)		<ul style="list-style-type: none"> <li>• Hedstrom &amp; Gould (2004)<sup>9</sup></li> <li>• Camiré <i>et al</i> (2009)<sup>8</sup></li> <li>• Jones &amp; Lavallee (2009)<sup>29</sup></li> <li>• Dworkin <i>et al</i> (2003)<sup>25</sup></li> <li>• Papacharsis <i>et al</i> (2005)<sup>23</sup></li> <li>• Larson <i>et al</i> (2006)<sup>27</sup></li> <li>• Hansen <i>et al</i> (2003)<sup>28</sup></li> </ul>
Planning	Knows how to plan ahead (Benson's 40 assets)		<ul style="list-style-type: none"> <li>• Benson's 40 assets<sup>13</sup></li> <li>• Jones &amp; Lavallee (2009)<sup>29</sup></li> <li>• Play It Smart<sup>6</sup></li> <li>• Petitpas <i>et al</i> (2005)<sup>19</sup></li> <li>• Catalano <i>et al</i> (2004)<sup>7</sup></li> <li>• Hansen <i>et al</i> (2003)<sup>28</sup></li> <li>• Gould <i>et al</i> (2002)<sup>12</sup></li> </ul>
Organisation	Including punctuality, time management, post sport planning, prioritising, multi-tasking, general planning and financial organisation (Jones & Lavallee, 2009b, p.164)		<ul style="list-style-type: none"> <li>• Jones &amp; Lavallee (2009)<sup>29</sup></li> </ul>
Personal Responsibility	<p>Taking responsibility for achieving their goals (Dworkin <i>et al</i>, 2003, p.22)</p> <p>To be personally responsible for their development and behaviour (Holt &amp; Dunn, 2004, p.207)</p>		<ul style="list-style-type: none"> <li>• Gould <i>et al</i> (2006)<sup>34</sup></li> <li>• Papacharsis <i>et al</i> (2005)<sup>23</sup></li> <li>• Holt <i>et al</i> (2008)<sup>24</sup></li> <li>• Jones &amp; Lavallee (2009)<sup>29</sup></li> <li>• Holt &amp; Dunn (2004)<sup>22</sup></li> <li>• Côté (2002)<sup>16</sup></li> <li>• Dworkin <i>et al</i> (2003)<sup>25</sup></li> <li>• Holt &amp; Sehn (2008)<sup>17</sup></li> </ul>
Assertion	Initiating behaviours such as asking coaches, teammates or parents for information (Côté, 2002 p. 530)		<ul style="list-style-type: none"> <li>• Côté (2002)<sup>16</sup></li> <li>• SUPER (Brunelle <i>et al</i>, 2007)<sup>20</sup></li> <li>• Hokowhitu Program<sup>33</sup></li> <li>• Petitpas <i>et al</i> (2004)<sup>6</sup></li> </ul>

	The importance of seeking social support when working on goals (Brunelle <i>et al</i> , 2007, p.45)		
Assertiveness			<ul style="list-style-type: none"> <li>• Catalano <i>et al</i> (2004)<sup>7</sup></li> </ul>
Autonomy	To experience one's actions as emanating from the self (Deci & Ryan, 1991, p.243)		<ul style="list-style-type: none"> <li>• Jones &amp; Lavallee (2009)<sup>29</sup></li> <li>• Catalano <i>et al</i> (2004)<sup>7</sup></li> </ul>
Empowerment	The community values youth and see them as resources with useful roles in society (Benson's 40 assets)		<ul style="list-style-type: none"> <li>• Jones &amp; Lavallee (2009)<sup>29</sup></li> <li>• Catalano <i>et al</i> (2004)<sup>7</sup></li> <li>• Benson's 40 assets<sup>13</sup> (external)</li> </ul>
Self-Determination	The ability to think for oneself and to take action consistent with that thought (Catalano <i>et al</i> , 2004, p.105)		<ul style="list-style-type: none"> <li>• Catalano <i>et al</i> (2004)<sup>7</sup></li> </ul>
Personal control in the future			<ul style="list-style-type: none"> <li>• Danish &amp; Nellen (1997)<sup>10</sup></li> </ul>
Decision Making	Young person knows how to make choices (Benson's 40 assets)		<ul style="list-style-type: none"> <li>• Weiss (2008)<sup>1</sup></li> <li>• Benson's 40 assets<sup>13</sup></li> <li>• Gould <i>et al</i> (2007)<sup>5</sup></li> <li>• Hokowhitu Program<sup>33</sup></li> <li>• Petitpas <i>et al</i> (2004)<sup>6</sup></li> <li>• Play It Smart<sup>6</sup></li> <li>• Danish &amp; Nellen (1997)<sup>10</sup></li> <li>• Camiré <i>et al</i> (2009)<sup>8</sup></li> <li>• Catalano <i>et al</i> (2004)<sup>7</sup></li> </ul>
Judgement			<ul style="list-style-type: none"> <li>• Weiss (2008)<sup>1</sup></li> </ul>
Problem Solving	Ability to use steps to solve problems (Catalano <i>et al</i> , 2004)		<ul style="list-style-type: none"> <li>• Catalano <i>et al</i> (2004)<sup>7</sup></li> <li>• Play It Smart<sup>6</sup></li> <li>• Hansen &amp; Larson (2005)<sup>30</sup></li> <li>• Petitpas <i>et al</i> (2004)<sup>6</sup></li> </ul>

			<ul style="list-style-type: none"> <li>• Papacharsis <i>et al</i> (2005)<sup>23</sup></li> <li>• Holt &amp; Jones (2008)<sup>26</sup></li> <li>• Larson <i>et al</i> (2006)<sup>27</sup></li> <li>• Petitpas <i>et al</i> (2005)<sup>19</sup></li> <li>• Hansen <i>et al</i> (2003)<sup>28</sup></li> </ul>
<b>Positive belief in future</b>	<p>The internalisation of hope and optimism about possible outcomes (Catalano <i>et al</i>, 2004, p.107)</p> <p>Young person is optimistic about his or her personal future (Benson's assets)</p>	One's tendency to be hopeful and optimistic about future outcomes	<ul style="list-style-type: none"> <li>• Catalano <i>et al</i> (2004)<sup>7</sup></li> <li>• Benson's 40 assets<sup>13</sup></li> <li>• Petitpas <i>et al</i> (2004)<sup>6</sup></li> <li>• Petitpas <i>et al</i> (2005)<sup>19</sup></li> <li>• Danish &amp; Nellen (1997)<sup>10</sup></li> </ul>
Optimism	A relatively stable personality disposition characterised by a general expectancy that good things will happen (Gould <i>et al</i> , 2002, p.174)		<ul style="list-style-type: none"> <li>• Gould <i>et al</i> (2002)<sup>12</sup></li> </ul>
Dispositional hope	A reciprocally derived sense of successful goal-directed determination (agency) and planning of ways to meet goals (pathways) (Gould <i>et al</i> , 2002, p.174)		<ul style="list-style-type: none"> <li>• Gould <i>et al</i> (2002)<sup>12</sup></li> </ul>
Positive Attitude	Maintaining a positive focus (Côté, 2002, p.521)		<ul style="list-style-type: none"> <li>• Côté (2002)<sup>16</sup></li> <li>• Weiss (1991)<sup>4</sup></li> </ul>
<b>Clear and positive identity</b>	The internal organisation of a coherent sense of self (Catalano <i>et al</i> , p.106)	One's clear sense of self that typically evolves from trying new things, gaining self-knowledge and learning one's capabilities	<ul style="list-style-type: none"> <li>• Catalano <i>et al</i> (2004)<sup>7</sup></li> <li>• Petitpas <i>et al</i> (2005)<sup>19</sup></li> </ul>
Identity	Described by Dworkin <i>et al</i> (2003)		<ul style="list-style-type: none"> <li>• Hansen &amp; Larson (2005)<sup>30</sup></li> </ul>



Exploration	as trying new things, gaining self-knowledge and learning your limits (p.20 and 21)		<ul style="list-style-type: none"> <li>• Holt &amp; Sehn (2008)<sup>17</sup></li> <li>• Play It Smart<sup>6</sup></li> <li>• Dworkin <i>et al</i> (2003)<sup>25</sup></li> </ul>
Identity Reflection	Used experiences as reflective material in the process of identity development (Hansen <i>et al</i> , 2003, p.27)		<ul style="list-style-type: none"> <li>• Hansen &amp; Larson (2005)<sup>30</sup></li> <li>• Dworkin <i>et al</i> (2003)<sup>25</sup></li> <li>• Hansen <i>et al</i> (2003)<sup>28</sup></li> </ul>
Self-aware			<ul style="list-style-type: none"> <li>• Gould <i>et al</i> (2002)<sup>12</sup></li> </ul>
Personal Power	Young person feels that he or she has control over things that happen to them (Benson's 40 assets)		<ul style="list-style-type: none"> <li>• Benson's 40 assets<sup>13</sup></li> </ul>
Sense of Purpose	Young person reports my life has a purpose and Benson classifies this within same category as personal power within positive identity		<ul style="list-style-type: none"> <li>• Benson's 40 assets<sup>13</sup></li> </ul>

<b>Discipline</b>	<p>The ability to make yourself do things you know you should do even when you do not want to (Cambridge Online Dictionary, 10/03/09)</p> <p>Conforming dedication to the sport and a willingness to sacrifice (Holt &amp; Dunn, 2004)</p>	<p>One's ability to make oneself <b>do</b> things one knows one should do even when one do not want to and includes making sacrifices in other areas of life to ensure maintenance of appropriate and/or healthy habits</p>	<ul style="list-style-type: none"> <li>• Holt &amp; Dunn (2004)<sup>22</sup></li> <li>• Jones &amp; Lavalley (2009)<sup>29</sup></li> <li>• Côté &amp; Fraser-Thomas (2007)<sup>3</sup></li> <li>• Hedstrom &amp; Gould (2004)<sup>9</sup></li> </ul>
Sacrifices	Sacrificed elements of their adolescent lifestyles...such sacrifices were an expected and necessary part of elite soccer (Holt & Dunn, 2004, p.207/208)		<ul style="list-style-type: none"> <li>• Holt &amp; Dunn (2004)<sup>22</sup></li> <li>• Jones &amp; Lavalley (2009)<sup>29</sup></li> </ul>
Restraint	Young person believes it is important not to be sexually active or to use alcohol or other drugs		<ul style="list-style-type: none"> <li>• Benson's 40 assets<sup>13</sup></li> </ul>

	(Benson's 40 assets)		
Resistance	Young person can resist negative peer pressure and dangerous situations (Benson's 40 assets)		<ul style="list-style-type: none"> <li>• Benson's 40 assets<sup>13</sup></li> <li>• Petitpas <i>et al</i> (2004)<sup>6</sup></li> </ul>
Overcoming peer pressure			<ul style="list-style-type: none"> <li>• Jones &amp; Lavallee (2009)<sup>29</sup></li> </ul>
Acquisition of a mature personality	A personality that allows the individual to cope with all the opportunities and obstacles that they will face in their chosen endeavour (Hedstrom & Gould, 2004, p.36)		<ul style="list-style-type: none"> <li>• Hedstrom &amp; Gould (2004)<sup>9</sup></li> </ul>
Learning to be mature			<ul style="list-style-type: none"> <li>• Jones &amp; Lavallee (2009)<sup>29</sup></li> </ul>
Maintenance of physical health	The ability to maintain physical health through proper exercise and nutrition (Scales <i>et al</i> , 2000, p.28)		<ul style="list-style-type: none"> <li>• Scales <i>et al</i> (2000)<sup>34</sup></li> </ul>
Healthy Lifestyle	An understanding of the importance of being healthy in all areas of their lives (Brunelle <i>et al</i> , 2007, p.45)		<ul style="list-style-type: none"> <li>• SUPER (Brunelle <i>et al</i>, 2007)<sup>20</sup></li> </ul>

<b>Commitment</b>	<p>The motivational forces and psychological attachment underpinning the pursuit of a soccer career (Holt and Dunn, 2004, p.208)</p> <p>Intrinsic motivation, task/mastery goals, approach goals, motivated behaviours such as effort and persistence (Harwood, 2008, p.118)</p>	One's tendency to pursue high personal standards with a focus on the value of effort, mastery and self-improvement	<ul style="list-style-type: none"> <li>• Harwood (2008)<sup>21</sup></li> <li>• Holt &amp; Dunn (2004)<sup>22</sup></li> <li>• Benson's 40 assets<sup>13</sup></li> </ul>
Motivation	'Because' answers to 'why' (Weiss, 2007, p.436)		<ul style="list-style-type: none"> <li>• Benson's 40 assets<sup>13</sup></li> <li>• Holt &amp; Morley (2004)<sup>32</sup></li> <li>• Holt &amp; Dunn (2004)<sup>22</sup></li> </ul>

			<ul style="list-style-type: none"> <li>• Weiss (1991; intrinsic)<sup>4</sup></li> <li>• Gould <i>et al</i> (2006)<sup>34</sup></li> <li>• Weiss (2008)<sup>1</sup></li> <li>• Holt &amp; Sehn (2008)<sup>17</sup></li> <li>• Hedstrom &amp; Gould (2004)<sup>9</sup></li> </ul>
Effort	Learning to push oneself, trying harder (Dworkin <i>et al</i> , 2003, p.21)		<ul style="list-style-type: none"> <li>• Jones &amp; Lavalley (2009)<sup>29</sup></li> <li>• Hansen &amp; Larson (2005)<sup>30</sup></li> <li>• Hedstrom &amp; Gould (2004)<sup>9</sup></li> <li>• Dworkin <i>et al</i> (2003)<sup>25</sup></li> <li>• Holt &amp; Sehn (2008)<sup>17</sup></li> <li>• Holt &amp; Jones (2008)<sup>26</sup></li> <li>• Larson <i>et al</i> (2006)<sup>27</sup></li> <li>• Petitpas <i>et al</i> (2005)<sup>19</sup></li> </ul>
Determination			<ul style="list-style-type: none"> <li>• Jones &amp; Lavalley (2009)<sup>29</sup></li> <li>• Holt &amp; Dunn (2004)<sup>22</sup></li> </ul>
Perseverance			<ul style="list-style-type: none"> <li>• Weiss (2008)<sup>1</sup></li> <li>• Jones &amp; Lavalley (2009)<sup>29</sup></li> </ul>
Persistence			<ul style="list-style-type: none"> <li>• Jones &amp; Lavalley (2009)<sup>29</sup></li> <li>• Papacharsis <i>et al</i> (2005)<sup>23</sup></li> <li>• Larson <i>et al</i> (2006)<sup>27</sup></li> <li>• Petitpas <i>et al</i> (2005)<sup>19</sup></li> </ul>
Engagement	Young person in actively engaged in learning (Benson's 40 assets)		<ul style="list-style-type: none"> <li>• Benson's 40 assets<sup>13</sup></li> </ul>
Work Ethic			<ul style="list-style-type: none"> <li>• Gould <i>et al</i> (2006)<sup>34</sup></li> <li>• Holt &amp; Sehn (2008)<sup>17</sup></li> <li>• Gould &amp; Carson (2008)<sup>18</sup></li> <li>• Hedstrom &amp; Gould (2004)<sup>9</sup></li> <li>• Gould <i>et al</i> (2002)<sup>12</sup></li> </ul>
Hard Work			<ul style="list-style-type: none"> <li>• Jones &amp; Lavalley (2009)<sup>29</sup></li> </ul>
Focus on	Learn what it means to compete		<ul style="list-style-type: none"> <li>• SUPER (Brunelle <i>et al</i>, 2007)<sup>20</sup></li> </ul>

personal performance	against oneself and understand that competing against oneself to attain personal excellence can enhance performance (Brunelle <i>et al</i> , 2007, p.45)		
Competitiveness	Intense, killer instinct (Gould <i>et al</i> , 2002, p.184)		<ul style="list-style-type: none"> <li>• Hedstrom &amp; Gould (2004)<sup>9</sup></li> <li>• Gould <i>et al</i> (2002)<sup>12</sup></li> </ul>
Learn from mistakes			<ul style="list-style-type: none"> <li>• Petitpas <i>et al</i> (2005)<sup>19</sup></li> </ul>
Adaptive perfectionism	High personal standards and a high preference for organisation which is positively associated with achievement (Gould <i>et al</i> , 2002, p.174)		<ul style="list-style-type: none"> <li>• Gould <i>et al</i> (2002)<sup>12</sup></li> </ul>
Drive	Driven to meet high personal standards and to please others (Gould <i>et al</i> , 2002, p.174)		<ul style="list-style-type: none"> <li>• Gould <i>et al</i> (2002)<sup>12</sup></li> </ul>

<b>Cooperation</b>	Behaviours such as helping others, sharing materials and equipment with teammates and complying with rules (Côté, 2002, p. 530)	One's ability to work with and help others, generally towards achieving a common goal	<ul style="list-style-type: none"> <li>• Côté (2002)<sup>16</sup></li> <li>• Weiss (2008)<sup>1</sup></li> </ul>
Teamwork	<p>The ability to work with others (Jones &amp; Lavalley, 2009, p.162)</p> <p>Working with others (Camiré <i>et al</i>, 2009, p.81)</p> <p>Learning to work together as a group or team...learning how different individuals and their personalities affect the group and the benefits of</p>	The ability to work with others towards a common goal	<ul style="list-style-type: none"> <li>• SUPER(Brunelle <i>et al</i>, 2007)<sup>20</sup></li> <li>• Gould &amp; Carson (2008)<sup>18</sup></li> <li>• Play It Smart<sup>6</sup></li> <li>• Hedstrom &amp; Gould (2004)<sup>9</sup></li> <li>• Petitpas <i>et al</i> (2004)<sup>6</sup></li> <li>• Camiré <i>et al</i> (2009)<sup>8</sup></li> <li>• Papacharsis <i>et al</i> (2005)<sup>23</sup></li> <li>• Holt <i>et al</i> (2008)<sup>24</sup></li> <li>• Jones &amp; Lavalley (2009)<sup>29</sup></li> </ul>

	working together (Dworkin <i>et al</i> , 2003, p.23)  Learning to work towards a common goal (Holt, 2008, p.29)		<ul style="list-style-type: none"> <li>• Holt &amp; Sehn (2008)<sup>17</sup></li> <li>• Côté &amp; Fraser-Thomas (2007)<sup>3</sup></li> <li>• Dworkin <i>et al</i> (2003)<sup>25</sup></li> <li>• Holt &amp; Jones (2008)<sup>26</sup></li> <li>• Larson <i>et al</i> (2006)<sup>27</sup></li> <li>• Petitpas <i>et al</i> (2005)<sup>19</sup></li> <li>• Hansen <i>et al</i> (2003)<sup>28</sup></li> </ul>
Connection	Positive bonds with people...that are reflected in bidirectional relationships (Lerner 5Cs)		<ul style="list-style-type: none"> <li>• Lerner's 5Cs<sup>2</sup></li> <li>• Gould &amp; Carson (2008)<sup>18</sup></li> <li>• Holt &amp; Sehn (2008)<sup>17</sup></li> </ul>
Bonding	Young person cares about his or her team (Benson's 40 assets)		<ul style="list-style-type: none"> <li>• Benson's 40 assets<sup>13</sup></li> </ul>
Group process skills			<ul style="list-style-type: none"> <li>• Hansen &amp; Larson (2005)<sup>30</sup></li> </ul>
Integration and Links to adult and community	Learning about the community and how it operates and experiencing support from leaders and community members (Dworkin <i>et al</i> , 2003, p.24)		<ul style="list-style-type: none"> <li>• Hansen &amp; Larson (2005)<sup>30</sup></li> <li>• Dworkin <i>et al</i> (2003)<sup>25</sup></li> <li>• Holt &amp; Sehn (2008)<sup>17</sup></li> <li>• Hansen <i>et al</i> (2003)<sup>28</sup></li> </ul>
Social capital	A process of learning about the community and how it operates and experiencing support from leaders and community members (Dworkin <i>et al</i> , 2003, p.24)		<ul style="list-style-type: none"> <li>• Dworkin <i>et al</i> (2003)<sup>25</sup></li> <li>• Hansen <i>et al</i> (2003)<sup>28</sup></li> <li>• Camiré <i>et al</i> (2009)<sup>8</sup></li> </ul>
Sense of belonging	Social interaction...peer interaction through both teammates and healthy competition (Hestrom & Gould, 2004, p.4)		<ul style="list-style-type: none"> <li>• Hedstrom &amp; Gould (2004)<sup>9</sup></li> <li>• Camiré <i>et al</i> (2009)<sup>8</sup></li> </ul>
Peer acceptance			<ul style="list-style-type: none"> <li>• Petitpas <i>et al</i> (2005)<sup>19</sup></li> </ul>
Developing	Dworkin <i>et al</i> (2003) describe as		<ul style="list-style-type: none"> <li>• Holt &amp; Sehn (2008)<sup>17</sup></li> </ul>

peer relationships	interacting with those who would normally be outside of existing network, loyalty and intimacy (p.22 and 23)		<ul style="list-style-type: none"> <li>• Hansen &amp; Larson (2005)<sup>30</sup></li> <li>• Dworkin <i>et al</i> (2003)<sup>25</sup></li> <li>• Hansen <i>et al</i> (2003)<sup>28</sup></li> <li>• Camiré <i>et al</i> (2009)<sup>8</sup></li> </ul>
Developing relationships			<ul style="list-style-type: none"> <li>• Jones &amp; Lavallee (2009)<sup>29</sup></li> </ul>
Create friendships			<ul style="list-style-type: none"> <li>• Camiré <i>et al</i> (2009)<sup>8</sup></li> </ul>
Create meaningful relationships			<ul style="list-style-type: none"> <li>• Camiré <i>et al</i> (2009)<sup>8</sup></li> </ul>
Interpersonal Competence	Young person has empathy, sensitivity and friendship skills (Benson's 40 assets)		<ul style="list-style-type: none"> <li>• Benson's 40 assets<sup>13</sup></li> <li>• Petitpas <i>et al</i> (2005)<sup>19</sup></li> <li>• Hedstrom &amp; Gould (2004)<sup>9</sup></li> </ul>

<b>Communication</b>	<p>A part of developing social skills and enabled them to work with others (Dworkin <i>et al</i>, 2003, p.24)</p> <p>Peer praise and encouragement, positioning instructions, listening, acknowledging, giving feedback and positive non-verbal behaviour (Harwood, 2008, p.118)</p>	One's ability to listen and to give and receive feedback and non-verbal behaviour	<ul style="list-style-type: none"> <li>• Catalano <i>et al</i> (2004)<sup>7</sup></li> <li>• Gould <i>et al</i> (2006)<sup>34</sup></li> <li>• Gould <i>et al</i> (2007)<sup>5</sup></li> <li>• Holt <i>et al</i> (2008)<sup>24</sup></li> <li>• Papacharsis <i>et al</i> (2005)<sup>23</sup></li> <li>• Harwood (2008)<sup>21</sup></li> <li>• Camiré <i>et al</i> (2009)<sup>8</sup></li> <li>• Dworkin <i>et al</i> (2003)<sup>25</sup></li> <li>• Jones &amp; Lavallee (2009)<sup>29</sup></li> <li>• Petitpas <i>et al</i> (2005)<sup>19</sup></li> </ul>
Listening			<ul style="list-style-type: none"> <li>• Gould <i>et al</i> (2006)<sup>34</sup></li> <li>• Dworkin <i>et al</i> (2003)<sup>25</sup></li> </ul>
Feedback	Being able to take and give feedback (Dworkin <i>et al</i> , 2003, p.23)		<ul style="list-style-type: none"> <li>• Papacharsis <i>et al</i> (2005)<sup>23</sup></li> <li>• Hansen &amp; Larson (2005)<sup>30</sup></li> <li>• Dworkin <i>et al</i> (2003)<sup>25</sup></li> </ul>

Social skills	Being able to take and give feedback and learning communication skills (Dworkin <i>et al</i> , 2003, p.23)		<ul style="list-style-type: none"> <li>• Play It Smart<sup>6</sup></li> <li>• Petitpas <i>et al</i> (2004)<sup>6</sup></li> <li>• Hedstrom &amp; Gould (2004)<sup>9</sup></li> <li>• Camiré <i>et al</i> (2009)<sup>8</sup></li> <li>• Jones &amp; Lavallee (2009)<sup>29</sup></li> <li>• Dworkin <i>et al</i> (2003)<sup>25</sup></li> <li>• Holt &amp; Sehn (2008)<sup>17</sup></li> <li>• Petitpas <i>et al</i> (2005)<sup>19</sup></li> <li>• Hansen <i>et al</i> (2003)<sup>28</sup></li> <li>• Gould <i>et al</i> (2002)<sup>12</sup></li> </ul>
<b>Conflict Resolution</b>	Young person seeks to resolve conflict non-violently (Benson's 40 Assets)	One's ability to peacefully resolve disagreements via negotiation and compromise	<ul style="list-style-type: none"> <li>• Catalano <i>et al</i> (2004)<sup>7</sup></li> <li>• Benson's 40 assets<sup>13</sup></li> <li>• Jones &amp; Lavallee (2009)<sup>29</sup></li> </ul>
Negotiation	Negotiation of material of coaching was defined to athletes as having, for example, input on the type of drills executed during practices and the strategies and plays implemented during games (Camiré <i>et al</i> , 2009, p.80)		<ul style="list-style-type: none"> <li>• Catalano <i>et al</i> (2004)<sup>7</sup></li> <li>• Camiré <i>et al</i> (2009)<sup>8</sup></li> </ul>
Compromise			<ul style="list-style-type: none"> <li>• Camiré <i>et al</i> (2009)<sup>8</sup></li> </ul>
<b>Moral Competence</b>	A youth's ability to assess and respond to the ethical, affective or social-justice dimensions of a situation (Catalano <i>et al</i> , 2004, p.105)	One possesses a respect both for others and for set rules and boundaries along with an understanding of the difference between right and wrong and the importance of being honest, even when it is not easy	<ul style="list-style-type: none"> <li>• Catalano <i>et al</i> (2004)<sup>7</sup></li> <li>• Gould &amp; Carson (2008)<sup>18</sup></li> <li>• Hedstrom &amp; Gould (2004)<sup>9</sup></li> <li>• Weiss (1991)<sup>4</sup></li> </ul>
Character	Respect for societal and cultural rules, possession of standards for		<ul style="list-style-type: none"> <li>• Lerner's 5Cs<sup>2</sup></li> <li>• Gould &amp; Carson (2008)<sup>18</sup></li> </ul>

	correct behaviours, a sense of right and wrong (morality) and integrity (Lerner's 5Cs)		<ul style="list-style-type: none"> <li>Gould <i>et al</i> (2007)<sup>5</sup></li> </ul>
Integrity	Young person acts on convictions and stands up for his or her beliefs (Benson's 40 assets)		<ul style="list-style-type: none"> <li>Weiss (2008)<sup>1</sup></li> <li>Benson's 40 assets<sup>13</sup></li> <li>Côté (2002)<sup>16</sup></li> </ul>
Honesty	Young person tells the truth even when it is not easy (Benson's 40 assets)		<ul style="list-style-type: none"> <li>Benson's 40 assets<sup>13</sup></li> </ul>
Courtesy			<ul style="list-style-type: none"> <li>Weiss (2008)<sup>1</sup></li> </ul>
Sportsmanship	Consideration of the physical and psychological welfare of self and others in the sporting environment (Weiss, 1991, p.344)		<ul style="list-style-type: none"> <li>Weiss (1991)<sup>4</sup></li> <li>Weiss (2008)<sup>1</sup></li> <li>Gould <i>et al</i> (2002)<sup>12</sup></li> </ul>
Respect	Respect for the rights of others (Hedstrom & Gould, 2004, p.5)		<ul style="list-style-type: none"> <li>Holt <i>et al</i> (2008)<sup>24</sup></li> <li>Hedstrom &amp; Gould (2004)<sup>9</sup></li> <li>Jones &amp; Lavallee (2009)<sup>29</sup></li> <li>Hansen &amp; Larson (2005)<sup>30</sup></li> <li>Holt &amp; Sehn (2008)<sup>17</sup></li> </ul>
Valuing diversity	<p>Developing relationships with and better understanding of peers from diverse ethnic and social class groups Hansen <i>et al</i>, 2003, p.28)</p> <p>Identify differences in the group and determine which ones are important and which ones are insignificant in reaching goals (Brunelle <i>et al</i>, 2007, p.45)</p>		<ul style="list-style-type: none"> <li>Scales <i>et al</i> (2000)<sup>34</sup></li> <li>SUPER (Brunelle <i>et al</i>, 2007)<sup>20</sup></li> <li>Hansen <i>et al</i> (2003)<sup>28</sup></li> </ul>



Conformity	Ways in which young players complied with the institutional demands they faced (Holt & Dunn, 2004, p.207)  Learning to conform to set rules and boundaries (Petitpas <i>et al</i> , 2005, p.68)		<ul style="list-style-type: none"> <li>• Holt &amp; Dunn (2004)<sup>22</sup></li> <li>• Hansen &amp; Larson (2005)<sup>30</sup></li> <li>• Papacharsis <i>et al</i> (2005)<sup>23</sup></li> <li>• Petitpas <i>et al</i> (2005)<sup>19</sup></li> </ul>
<b>Emotional self regulation</b>	Dworkin <i>et al</i> (2003) describe as learning to control anger and anxiety, preventing emotions from interfering with attention and performance, acquiring strategies for managing stress and learning to use positive emotions constructively (p.22)	One's ability to control anger and anxiety, prevent emotions from interfering with attention and performance, acquire strategies for managing stress and to use positive emotions constructively	<ul style="list-style-type: none"> <li>• Hansen &amp; Larson (2005)<sup>30</sup></li> <li>• SUPER (Brunelle <i>et al</i>, 2007)<sup>20</sup></li> <li>• Holt &amp; Sehn (2008)<sup>17</sup></li> <li>• Dworkin <i>et al</i> (2003)<sup>25</sup></li> <li>• Holt &amp; Jones (2008)<sup>26</sup></li> </ul>
Emotional Control	Regulating emotional states (Larson <i>et al</i> , 2006, p.855)		<ul style="list-style-type: none"> <li>• Gould &amp; Carson (2008)<sup>18</sup></li> <li>• Hedstrom &amp; Gould (2004)<sup>9</sup></li> <li>• Larson <i>et al</i> (2006)<sup>27</sup></li> <li>• Petitpas <i>et al</i> (2005)<sup>19</sup></li> </ul>
Self control	Behaviours that emerge in conflict situations such as responding appropriately to a penalty during a game, corrective feedback from an adult or teasing from an opponent (Côté, 2002, p.530)		<ul style="list-style-type: none"> <li>• Weiss (2008)<sup>1</sup></li> <li>• Côté (2002)<sup>16</sup></li> <li>• Papacharsis <i>et al</i> (2005)<sup>23</sup></li> </ul>
Relaxation	Help children cope with stress and sustain motivation and self-confidence (Weiss, 1991, p.349)  To reduce tension and to focus and		<ul style="list-style-type: none"> <li>• SUPER (Brunelle <i>et al</i>, 2007)<sup>20</sup></li> <li>• Côté (2002)<sup>16</sup></li> <li>• Weiss (1991)<sup>4</sup></li> </ul>

	breathe as a means to help them relax (Brunelle <i>et al</i> , 2007, p.45)		
Stress Management	Discussed in conjunction with relaxation in Weiss (1991)		<ul style="list-style-type: none"> <li>• Gould <i>et al</i> (2007)<sup>5</sup></li> <li>• Côté (2002)<sup>16</sup></li> <li>• Holt &amp; Jones (2008)<sup>26</sup></li> <li>• Weiss (1991)<sup>4</sup></li> <li>• Dworkin <i>et al</i> (2003)<sup>25</sup></li> </ul>
Control	Emotional awareness, relaxation and energising routines, positive body language or self-talk and quick self or peer recovery from errors (Harwood, 2008, p.119)		<ul style="list-style-type: none"> <li>• Harwood (2008)<sup>21</sup></li> </ul>
Self-Talk	Is part of Harwood's 2008 'control' competency		<ul style="list-style-type: none"> <li>• Harwood (2008)<sup>21</sup></li> <li>• Catalano <i>et al</i> (2004)<sup>7</sup></li> <li>• SUPER (Brunelle <i>et al</i>, 2007)<sup>20</sup></li> <li>• Holt &amp; Jones (2008)<sup>26</sup></li> <li>• Gould <i>et al</i> (2002)<sup>12</sup></li> </ul>
Ability to perform under pressure	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 (Holt & Dunn, 2004, p.212)		<ul style="list-style-type: none"> <li>• Jones &amp; Lavallee (2009)<sup>29</sup></li> <li>• Papacharsis <i>et al</i> (2005)<sup>23</sup></li> <li>• Holt &amp; Dunn (2004)<sup>22</sup></li> </ul>
Handle success and failure			<ul style="list-style-type: none"> <li>• Papacharsis <i>et al</i> (2005)<sup>23</sup></li> <li>• Petitpas <i>et al</i> (2005)<sup>19</sup></li> </ul>
Imagery	Imagery in youth sport can be used for learning or improving a skill, preparing for competition or practice or recovering from an injury (Côté, 2002, p.525)		<ul style="list-style-type: none"> <li>• Côté (2002)<sup>16</sup></li> <li>• Weiss (1991)<sup>4</sup></li> <li>• Gould <i>et al</i> (2002)<sup>12</sup></li> </ul>

	A natural strategy that is used to rehearse skill sequences, competition strategies and retention of newly acquired skills (Weiss, 1991, p.349)		
Concentration	Attention to narrow or broad internal and external task-relevant cues, ability to switch attentional styles and maintain correct attentional focus e.g. distractions and fatigue (Harwood, 2008, p.119)		<ul style="list-style-type: none"> <li>• Harwood (2008)<sup>21</sup></li> <li>• Holt &amp; Sehn (2008)<sup>17</sup></li> </ul>
Managing distractions	Ability to focus on what you can control, not be easily distracted and automatise (Gould <i>et al</i> , 2002, p.184)		<ul style="list-style-type: none"> <li>• Jones &amp; Lavalley (2009)<sup>29</sup></li> <li>• Hedstrom &amp; Gould (2004)<sup>9</sup></li> <li>• Gould <i>et al</i> (2002)<sup>12</sup></li> </ul>
Dealing with Fatigue			<ul style="list-style-type: none"> <li>• Jones &amp; Lavalley (2009)<sup>29</sup></li> </ul>
Ability to cope with and control anxiety			<ul style="list-style-type: none"> <li>• Gould <i>et al</i> (2002)<sup>12</sup></li> </ul>
Self Management	Strategies comprised of skills for managing emotional reactions or impulses (Catalano <i>et al</i> , 2004, p.104)		<ul style="list-style-type: none"> <li>• Petitpas <i>et al</i> (2005)<sup>19</sup></li> <li>• Catalano <i>et al</i> (2004)<sup>7</sup></li> </ul>
Ability to focus	Ability to focus on what you can control, not be easily distracted and automatise (Gould <i>et al</i> , 2002, p.184)		<ul style="list-style-type: none"> <li>• Gould <i>et al</i> (2002)<sup>12</sup></li> </ul>
<b>Leadership</b>	Learning to delegate, being cautious about what one said, taking blame for someone else's	One's ability to give back to the swimming community through encouragement of young swimmers and	<ul style="list-style-type: none"> <li>• Weiss (2008)<sup>1</sup></li> <li>• Scales <i>et al</i> (2000)<sup>34</sup></li> <li>• Gould <i>et al</i> (2007)<sup>5</sup></li> </ul>

	<p>mistakes and asking for help (Dworkin <i>et al</i>, 2003, p.23)</p> <p>Serves to enhance adolescent's sense of making useful contributions (Scales <i>et al</i>, 2000, p.28)</p>	acting as a positive role model	<ul style="list-style-type: none"> <li>• Hedstrom &amp; Gould (2004)<sup>9</sup></li> <li>• Hansen &amp; Larson (2005)<sup>30</sup></li> <li>• Holt <i>et al</i> (2008)<sup>24</sup></li> <li>• Jones &amp; Lavallee (2009)<sup>29</sup></li> <li>• Côté &amp; Fraser-Thomas (2007)<sup>3</sup></li> <li>• Camiré <i>et al</i> (2009)<sup>8</sup></li> <li>• Dworkin <i>et al</i> (2003)<sup>25</sup></li> <li>• Petitpas <i>et al</i> (2005)<sup>19</sup></li> <li>• Hansen <i>et al</i> (2003)<sup>28</sup></li> </ul>
Contribution	A young person enacts behaviours indicative of the 5Cs by contributing positively to self, family, community and, ultimately, civil society (Lerner <i>et al</i> , 2005, p.23)		<ul style="list-style-type: none"> <li>• Lerner <i>et al</i> (2005)<sup>31</sup></li> </ul>
<b>Empathy</b>	<p>Behaviours that show concern for opponents', teammates's, or adults' feelings (Côté, 2002, p.530)</p> <p>Understanding the viewpoints of others (Dworkin <i>et al</i>, 2003, p.23)</p>	One's ability to share and show concern for someone else's feelings, experiences or viewpoints by imagining what it would be like in their situation	<ul style="list-style-type: none"> <li>• Côté (2002)<sup>16</sup></li> <li>• Jones &amp; Lavallee (2009)<sup>29</sup></li> <li>• Dworkin <i>et al</i> (2003)<sup>25</sup></li> </ul>
Caring	<p>A sense of sympathy and empathy for others (Lerner's 5Cs)</p> <p>Young person places high value on helping other people (Benson's 40 assets)</p>		<ul style="list-style-type: none"> <li>• Lerner's 5Cs<sup>2</sup></li> <li>• Benson's 40 assets<sup>13</sup></li> </ul>
Emotional Competence	The ability to identify and respond to feelings and emotional reactions in oneself and others (Catalano <i>et al</i> ,		<ul style="list-style-type: none"> <li>• Catalano <i>et al</i> (2004)<sup>7</sup></li> </ul>

	2004, p.104)		
<b>Resilience</b>	<p>Ability to bounce back after adversity... (and) to overcome personal and contextual obstacles (Holt &amp; Dunn, 2004, p. 210)</p> <p>The ability to use coping strategies to overcome obstacles (Holt &amp; Dunn, 2004, p.199)</p>	One's ability to use coping strategies to bounce back and to overcome obstacles	<ul style="list-style-type: none"> <li>• Holt &amp; Dunn (2004)<sup>22</sup></li> <li>• Catalano <i>et al</i> (2004)<sup>7</sup></li> <li>• Schulman &amp; Davies (2007)<sup>11</sup></li> <li>• Jones &amp; Lavallee (2009)<sup>29</sup></li> </ul>
Overcoming adversity	Closely related to the notion of resilience...a necessary element of overall adjustment (Scales <i>et al</i> , 2000, p.28)		<ul style="list-style-type: none"> <li>• Scales <i>et al</i> (2000)<sup>34</sup></li> <li>• Hokowhitu Program<sup>33</sup></li> <li>• Petitpas <i>et al</i> (2005)<sup>19</sup></li> </ul>
Overcome setbacks			<ul style="list-style-type: none"> <li>• Petitpas <i>et al</i> (2005)<sup>19</sup></li> </ul>
<b>Self Appraisal</b>	<p>When you examine someone or something in order to judge their qualities, success or needs (Cambridge Online Dictionary, 08/03/09)</p> <p>Self monitoring is part of deliberate practice which is how coaches and parents appear to instil self-regulation in performers and is described as self-monitoring performance outcomes and receiving feedback about current performance (Cleary &amp; Zimmerman, 2001, p.186)</p>	One's ability to examine and monitor one's strengths and areas for improvement	<ul style="list-style-type: none"> <li>• Petitpas <i>et al</i> (2005)<sup>19</sup></li> </ul>

<p><b>Mental Toughness</b></p>	<p>The ability to keep physical arousal within manageable limits (Côté, 2002, p.524)</p> <p>The natural or developed psychological edge that enables you to...cope better than your opponents with the many demands...that sport places on a performer...be more consistent and better than your opponents in remaining determined, focused, confident and in control under pressure.</p> <p>Mental toughness is made up of 12 attributes which, in rank order importance are:</p> <ul style="list-style-type: none"> <li>• Self-belief in ability to achieve competition goals</li> <li>• Bouncing back from performance setbacks with increased determination to succeed</li> <li>• Self-belief that you possess unique qualities and abilities that make you better than your opponents</li> <li>• An insatiable desire and internalised motives to succeed</li> </ul>	<p>One's psychological edge that enables positive coping strategies to ensure consistent swimming performance and includes self-belief, desire/motivation, dealing with pressure and anxiety, performance and lifestyle related focus, and pain/hardship factors</p>	<ul style="list-style-type: none"> <li>• Côté (2002)<sup>16</sup></li> <li>• Hedstrom &amp; Gould (2004)<sup>9</sup></li> <li>• Gould <i>et al</i> (2002)<sup>12</sup></li> </ul>
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	<ul style="list-style-type: none"> <li>• Remaining focused in face of competition-specific distractions</li> <li>• Regaining psychological control following unexpected, uncontrollable events</li> <li>• Pushing back the boundaries of physical and emotional pain while still maintaining technique and effort under distress in training and competition</li> <li>• Accepting that competition anxiety is inevitable and knowing that you can cope with it</li> <li>• Not being adversely affected by others' good and bad performances</li> <li>• Thriving on the pressure of competition</li> <li>• Remaining focused in the face of personal life distractions</li> <li>• Switching a sport focus on and off as required</li> </ul> <p>(Jones <i>et al</i>, 2002)</p>		
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# Appendix 2

Psychology for Swimming Questionnaire:  
Study 1



## Psychology for Swimming Questionnaire

### Expert Validation

When considering these assets, please ensure that you are primarily reflecting on the individual in their athletic domain.

<b>Asset</b>	<b>Definition</b>
<b>Perceived Sport Competence</b> <ul style="list-style-type: none"><li>• Self Efficacy</li><li>• Self Concept</li><li>• Sport Confidence</li></ul>	One's positive beliefs about capability or skill in swimming

**Does the overall name in bold accurately capture all those within the group?**

Yes      No      Unsure

**If not, please circle which other asset best describes the group or suggest an alternative group name.**

**Do any assets need to be measured separately?**

Yes      No      Unsure

**If yes, please note which ones.**

**Are all the assets in the correct groups?**

Yes      No      Unsure

**If not, please suggest which groups they should be in.**

**Do you think the definition is accurate?**

Yes      No      Unsure

**If not, please suggest an alternative.**

**Do you think the definition is clear and will be easily understood by coaches?**

**Yes      No      Unsure**

**If not, please suggest an alternative.**

**Self-Esteem**

- Confidence
- Courage
- Self Perceptions

One's overall general belief in self and ability

**Does the overall name in bold accurately capture all those within the group?**

**Yes      No      Unsure**

**If not, please circle which other asset best describes the group or suggest an alternative group name.**

**Do any assets need to be measured separately?**

**Yes      No      Unsure**

**If yes, please note which ones.**

**Are all the assets in the correct groups?**

**Yes      No      Unsure**

**If not, please suggest which groups they should be in.**

**Do you think the definition is accurate?**

**Yes      No      Unsure**

**If not, please suggest an alternative.**

**Do you think the definition is clear and will be easily understood by coaches?**

**Yes      No      Unsure**

**If not, please suggest an alternative.**

**Initiative**

- Goal setting
- Ambitions
- Time management
- Planning
- Organisation
- Personal Responsibility
- Assertion
- Assertiveness
- Autonomy
- Empowerment
- Self-Determination
- Personal control in the future
- Decision Making
- Judgement
- Problem Solving

One's ability to set realistic goals, manage time and take responsibility for oneself

**Does the overall name in bold accurately capture all those within the group?**

**Yes      No      Unsure**

**If not, please circle which other asset best describes the group or suggest an alternative group name.**

**Do any assets need to be measured separately?**

**Yes      No      Unsure**

**If yes, please note which ones.**

**Are all the assets in the correct groups?**

**Yes      No      Unsure**

**If not, please suggest which groups they should be in.**

**Do you think the definition is accurate?**

**Yes      No      Unsure**

**If not, please suggest an alternative.**

**Do you think the definition is clear and will be easily understood by coaches?**

**Yes      No      Unsure**

**If not, please suggest an alternative.**

**Positive Belief in Future**

- Optimism
- Dispositional hope
- Positive attitude

One's tendency to be hopeful and optimistic about future outcomes

**Does the overall name in bold accurately capture all those within the group?**

**Yes      No      Unsure**

**If not, please circle which other asset best describes the group or suggest an alternative group name.**

**Do any assets need to be measured separately?**

**Yes      No      Unsure**

**If yes, please note which ones.**

**Are all the assets in the correct groups?**

**Yes      No      Unsure**

**If not, please suggest which groups they should be in.**

**Do you think the definition is accurate?**

**Yes      No      Unsure**

**If not, please suggest an alternative.**

**Do you think the definition is clear and will be easily understood by coaches?**

**Yes      No      Unsure**

**If not, please suggest an alternative.**

**Clear and positive identity**

- Identity Exploration
- Identity Reflection
- Self-aware
- Personal Power
- Sense of Purpose

One's clear sense of self that typically evolves from trying new things, gaining self-knowledge and learning one's capabilities

**Does the overall name in bold accurately capture all those within the group?**

**Yes      No      Unsure**

**If not, please circle which other asset best describes the group or suggest an alternative group name.**

**Do any assets need to be measured separately?**

**Yes      No      Unsure**

**If yes, please note which ones.**

**Are all the assets in the correct groups?**

**Yes      No      Unsure**

**If not, please suggest which groups they should be in.**

**Do you think the definition is accurate?**

**Yes      No      Unsure**

**If not, please suggest an alternative.**

**Do you think the definition is clear and will be easily understood by coaches?**

**Yes      No      Unsure**

**If not, please suggest an alternative.**

**Discipline**

- Sacrifices
- Restraint
- Resistance
- Overcoming peer pressure
- Acquisition of a mature personality
- Learning to be mature
- Maintenance of physical health
- Healthy Lifestyle

One's ability to make oneself **do** things one knows one should do even when one does not want to, and includes making sacrifices in other areas of life to ensure maintenance of appropriate and/or healthy habits

**Does the overall name in bold accurately capture all those within the group?**

**Yes      No      Unsure**

**If not, please circle which other asset best describes the group or suggest an alternative group name.**

**Do any assets need to be measured separately?**

**Yes      No      Unsure**

**If yes, please note which ones.**

**Are all the assets in the correct groups?**

**Yes      No      Unsure**

If not, please suggest which groups they should be in.

Do you think the definition is accurate?

Yes No Unsure

If not, please suggest an alternative.

Do you think the definition is clear and will be easily understood by coaches?

Yes No Unsure

If not, please suggest an alternative.

**Commitment**

- Motivation
- Effort
- Determination
- Perseverance
- Persistence
- Engagement
- Work Ethic
- Hard Work
- Focus on personal performance
- Competitiveness
- Learn from mistakes
- Adaptive perfectionism
- Drive

One's tendency to pursue high personal standards with a focus on the value of effort, mastery and self-improvement

Does the overall name in bold accurately capture all those within the group?

Yes No Unsure

If not, please circle which other asset best describes the group or suggest an alternative group name.

Do any assets need to be measured separately?

Yes No Unsure

If yes, please note which ones.

Are all the assets in the correct groups?

Yes No Unsure

If not, please suggest which groups they should be in.

Do you think the definition is accurate?

Yes No Unsure

If not, please suggest an alternative.

Do you think the definition is clear and will be easily understood by coaches?

Yes No Unsure

If not, please suggest an alternative.

**Cooperation**

- Teamwork
- Connection
- Bonding
- Compromise
- Group process skills
- Integration and links to adult and community
- Social capital
- Sense of belonging
- Peer acceptance
- Developing peer relationships
- Developing relationships
- Create friendships
- Create meaningful relationships
- Interpersonal competence

One's ability to work with and help others, generally towards achieving a common goal

Does the overall name in bold accurately capture all those within the group?

Yes No Unsure



If not, please circle which other asset best describes the group or suggest an alternative group name.

Do any assets need to be measured separately?

Yes No Unsure

If yes, please note which ones.

Are all the assets in the correct groups?

Yes No Unsure

If not, please suggest which groups they should be in.

Do you think the definition is accurate?

Yes No Unsure

If not, please suggest an alternative.

Do you think the definition is clear and will be easily understood by coaches?

Yes No Unsure

If not, please suggest an alternative.

**Communication**

- Listening
- Feedback
- Social skills

One's ability to listen and to give and receive feedback and non-verbal behaviour

Does the overall name in bold accurately capture all those within the group?

Yes No Unsure

If not, please circle which other asset best describes the group or suggest an alternative group name.

**Do any assets need to be measured separately?**

Yes      No      Unsure

If yes, please note which ones.

**Are all the assets in the correct groups?**

Yes      No      Unsure

If not, please suggest which groups they should be in.

**Do you think the definition is accurate?**

Yes      No      Unsure

If not, please suggest an alternative.

**Do you think the definition is clear and will be easily understood by coaches?**

Yes      No      Unsure

If not, please suggest an alternative.

**Conflict Resolution**

- Negotiation
- Compromise

One's ability to peacefully resolve disagreements via negotiation and compromise

**Does the overall name in bold accurately capture all those within the group?**

Yes      No      Unsure

If not, please circle which other asset best describes the group or suggest an alternative group name.

**Do any assets need to be measured separately?**

Yes      No      Unsure

If yes, please note which ones.

Are all the assets in the correct groups?

Yes No Unsure

If not, please suggest which groups they should be in.

Do you think the definition is accurate?

Yes No Unsure

If not, please suggest an alternative.

Do you think the definition is clear and will be easily understood by coaches?

Yes No Unsure

If not, please suggest an alternative.

**Moral Competence**

- Character
- Integrity
- Honesty
- Courtesy
- Sportsmanship
- Respect
- Valuing diversity
- Conformity

One possesses a respect both for others and for set rules and boundaries along with an understanding of the difference between right and wrong and the importance of being honest, even when it is not easy

Does the overall name in bold accurately capture all those within the group?

Yes No Unsure

If not, please circle which other asset best describes the group or suggest an alternative group name.

**Do any assets need to be measured separately?**

**Yes      No      Unsure**

**If yes, please note which ones.**

**Are all the assets in the correct groups?**

**Yes      No      Unsure**

**If not, please suggest which groups they should be in.**

**Do you think the definition is accurate?**

**Yes      No      Unsure**

**If not, please suggest an alternative.**

**Do you think the definition is clear and will be easily understood by coaches?**

**Yes      No      Unsure**

**If not, please suggest an alternative.**

**Emotional self regulation**

- Emotional control
- Self control
- Relaxation
- Stress Management
- Control
- Self-Talk
- Ability to perform under pressure
- Handle success and failure
- Imagery
- Concentration
- Managing distractions
- Dealing with Fatigue
- Ability to cope with and control anxiety
- Self Management
- Ability to focus

One's ability to control anger and anxiety, prevent emotions from interfering with attention and performance, acquire strategies for managing stress and to use positive emotions constructively

**Does the overall name in bold accurately capture all those within the group?**

Yes      No      Unsure

**If not, please circle which other asset best describes the group or suggest an alternative group name.**

**Do any assets need to be measured separately?**

Yes      No      Unsure

**If yes, please note which ones.**

**Are all the assets in the correct groups?**

Yes      No      Unsure

**If not, please suggest which groups they should be in.**

**Do you think the definition is accurate?**

Yes      No      Unsure

**If not, please suggest an alternative.**

**Do you think the definition is clear and will be easily understood by coaches?**

Yes      No      Unsure

**If not, please suggest an alternative.**

**Leadership**

- Contribution

One's ability to give back to the swimming community through encouragement of young swimmers and acting as a positive role model

**Does the overall name in bold accurately capture all those within the group?**

Yes      No      Unsure

If not, please circle which other asset best describes the group or suggest an alternative group name.

Do any assets need to be measured separately?

Yes No Unsure

If yes, please note which ones.

Are all the assets in the correct groups?

Yes No Unsure

If not, please suggest which groups they should be in.

Do you think the definition is accurate?

Yes No Unsure

If not, please suggest an alternative.

Do you think the definition is clear and will be easily understood by coaches?

Yes No Unsure

If not, please suggest an alternative.

**Empathy**

- Caring
- Emotional Competence

One's ability to share and show concern for someone else's feelings, experiences or viewpoints by imagining what it would be like in their situation

Does the overall name in bold accurately capture all those within the group?

Yes No Unsure

If not, please circle which other asset best describes the group or suggest an alternative group name.

**Do any assets need to be measured separately?**

Yes      No      Unsure

If yes, please note which ones.

**Are all the assets in the correct groups?**

Yes      No      Unsure

If not, please suggest which groups they should be in.

**Do you think the definition is accurate?**

Yes      No      Unsure

If not, please suggest an alternative.

**Do you think the definition is clear and will be easily understood by coaches?**

Yes      No      Unsure

If not, please suggest an alternative.

**Resilience**

- Overcoming adversity
- Overcome setbacks

One's ability to use coping strategies to bounce back and to overcome obstacles

**Does the overall name in bold accurately capture all those within the group?**

Yes      No      Unsure

If not, please circle which other asset best describes the group or suggest an alternative group name.

**Do any assets need to be measured separately?**

Yes      No      Unsure

If yes, please note which ones.

Are all the assets in the correct groups?

Yes No Unsure

If not, please suggest which groups they should be in.

Do you think the definition is accurate?

Yes No Unsure

If not, please suggest an alternative.

Do you think the definition is clear and will be easily understood by coaches?

Yes No Unsure

If not, please suggest an alternative.

**Self-appraisal**

One's ability to examine and monitor one's strengths and areas for improvement

Does this asset warrant its own assessment?

Yes No Unsure

If not, please suggest which group it best fits into.

Do you think the definition is accurate?

Yes No Unsure

If not, please suggest an alternative.



**Do you think the definition is clear and will be easily understood by coaches?**

**Yes      No      Unsure**

**If not, please suggest an alternative.**

**Mental Toughness**

One's psychological edge that enables positive coping strategies to ensure consistent swimming performance and includes self-belief, desire/motivation, dealing with pressure and anxiety, performance and lifestyle related focus, and pain/hardship factors

**Does this asset warrant its own assessment?**

**Yes      No      Unsure**

**If not, please suggest which group it best fits into.**

**Do you think the definition is accurate?**

**Yes      No      Unsure**

**If not, please suggest an alternative.**

**Do you think the definition is clear and will be easily understood by coaches?**

**Yes      No      Unsure**

**If not, please suggest an alternative.**

**If you have any additional comments on these assets, their definitions, their groupings or any other aspects please insert below.**



# Appendix 3

Example of Participant Profile: Study 1

## Participant 1 Analysis – Groupings

Analysis based on a combination of interview and questionnaire data

Original Version	Participant Version
<p><b>Perceived Sport Competence</b></p> <ul style="list-style-type: none"> <li>• Self Efficacy</li> <li>• Self Concept</li> <li>• Sport Confidence</li> </ul>	<p><b>SELF PERCEPTIONS</b></p> <p><b>Perceived Sport Competence</b></p> <ul style="list-style-type: none"> <li>○ Self Efficacy</li> <li>○ Sport Confidence</li> </ul> <p><b>Self-Esteem</b></p> <ul style="list-style-type: none"> <li>○ Confidence</li> <li>○ Self Concept</li> <li>○ Self-worth</li> </ul> <p><b>Clear and positive identity</b></p> <ul style="list-style-type: none"> <li>○ Identity Exploration</li> <li>○ Identity Reflection</li> <li>○ Self-aware</li> <li>○ Personal Power</li> <li>○ Sense of Purpose</li> </ul> <p><b>Self-appraisal</b></p> <ul style="list-style-type: none"> <li>○ Focus on personal performance</li> <li>○ Learn from mistakes</li> <li>○ Adaptive perfectionism</li> </ul>
<p><b>Self-Esteem</b></p> <ul style="list-style-type: none"> <li>• Confidence</li> <li>• Courage</li> <li>• Self Perceptions</li> </ul>	
<p><b>Initiative</b></p> <ul style="list-style-type: none"> <li>• Goal setting</li> <li>• Ambitions</li> <li>• Time management</li> <li>• Planning</li> <li>• Organisation</li> <li>• Personal Responsibility</li> <li>• Assertion</li> <li>• Assertiveness</li> <li>• Autonomy</li> <li>• Empowerment</li> <li>• Self-Determination</li> <li>• Personal control in the future</li> <li>• Decision Making</li> <li>• Judgement</li> <li>• Problem Solving</li> </ul>	<p><b>SPORT SKILLS</b></p> <p><b>Organisation</b></p> <ul style="list-style-type: none"> <li>○ Goal setting</li> <li>○ Ambition</li> <li>○ Time management</li> <li>○ Planning</li> <li>○ Personal Responsibility</li> <li>○ Assertiveness</li> <li>○ Personal control in the future</li> <li>○ Decision Making</li> <li>○ Problem Solving</li> </ul> <p><b>Positive Attitude</b></p> <ul style="list-style-type: none"> <li>○ Optimism</li> <li>○ Dispositional hope</li> <li>○ Positive belief in the future</li> </ul> <p><b>Discipline</b></p> <ul style="list-style-type: none"> <li>○ Sacrifices</li> <li>○ Restraint</li> <li>○ Resistance</li> <li>○ Overcoming peer pressure</li> <li>○ Acquisition of a mature personality</li> <li>○ Learning to be mature</li> </ul>

	<ul style="list-style-type: none"> <li>○ Healthy Lifestyle</li> </ul> <p><b>Motivation</b></p> <ul style="list-style-type: none"> <li>○ Commitment</li> <li>○ Effort</li> <li>○ Determination</li> <li>○ Perseverance</li> <li>○ Persistence</li> <li>○ Engagement</li> <li>○ Work Ethic</li> <li>○ Hard Work</li> <li>○ Competitiveness</li> <li>○ Drive</li> <li>○ Autonomy</li> <li>○ Empowerment</li> <li>○ Self-Determination</li> </ul>
<p><b>Positive Belief in Future</b></p> <ul style="list-style-type: none"> <li>● Optimism</li> <li>● Dispositional hope</li> <li>● Positive attitude</li> </ul>	
<p><b>Clear and positive identity</b></p> <ul style="list-style-type: none"> <li>● Identity Exploration</li> <li>● Identity Reflection</li> <li>● Self-aware</li> <li>● Personal Power</li> <li>● Sense of Purpose</li> </ul>	
<p><b>Discipline</b></p> <ul style="list-style-type: none"> <li>● Sacrifices</li> <li>● Restraint</li> <li>● Resistance</li> <li>● Overcoming peer pressure</li> <li>● Acquisition of a mature personality</li> <li>● Learning to be mature</li> <li>● Maintenance of physical health</li> <li>● Healthy Lifestyle</li> </ul>	
<p><b>Commitment</b></p> <ul style="list-style-type: none"> <li>● Motivation</li> <li>● Effort</li> <li>● Determination</li> <li>● Perseverance</li> <li>● Persistence</li> <li>● Engagement</li> <li>● Work Ethic</li> <li>● Hard Work</li> <li>● Focus on personal performance</li> <li>● Competitiveness</li> <li>● Learn from mistakes</li> <li>● Adaptive perfectionism</li> </ul>	

<ul style="list-style-type: none"> <li>• Drive</li> </ul>	
<p><b>Cooperation</b></p> <ul style="list-style-type: none"> <li>• Teamwork</li> <li>• Connection</li> <li>• Bonding</li> <li>• Compromise</li> <li>• Group process skills</li> <li>• Integration and Links to adult and community</li> <li>• Social capital</li> <li>• Sense of belonging</li> <li>• Peer acceptance</li> <li>• Developing peer relationships</li> <li>• Developing relationships</li> <li>• Create friendships</li> <li>• Create meaningful relationships</li> <li>• Interpersonal Competence</li> </ul>	<p><b>SOCIAL SKILLS</b></p> <p><b>Teamwork</b></p> <ul style="list-style-type: none"> <li>○ Cooperation</li> <li>○ Connection</li> <li>○ Bonding</li> <li>○ Compromise</li> <li>○ Group process skills</li> <li>○ Integration and Links to adult and community</li> <li>○ Social capital</li> <li>○ Sense of belonging</li> <li>○ Peer acceptance</li> <li>○ Developing peer relationships</li> <li>○ Developing relationships</li> <li>○ Create friendships</li> <li>○ Create meaningful relationships</li> <li>○ Interpersonal Competence</li> </ul> <p><b>Communication</b></p> <ul style="list-style-type: none"> <li>○ Listening</li> <li>○ Feedback</li> <li>○ Social skills</li> </ul> <p><b>Handling Conflict and Disagreement</b></p> <ul style="list-style-type: none"> <li>○ Negotiation</li> <li>○ Compromise</li> </ul>
<p><b>Communication</b></p> <ul style="list-style-type: none"> <li>• Listening</li> <li>• Feedback</li> <li>• Social skills</li> </ul>	
<p><b>Conflict Resolution</b></p> <ul style="list-style-type: none"> <li>• Negotiation</li> <li>• Compromise</li> </ul>	
<p><b>Moral Competence</b></p> <ul style="list-style-type: none"> <li>• Character</li> <li>• Integrity</li> <li>• Honesty</li> <li>• Courtesy</li> <li>• Sportsmanship</li> <li>• Respect</li> <li>• Valuing diversity</li> <li>• Conformity</li> </ul>	<p><b><i>Integrity/Character</i></b></p> <ul style="list-style-type: none"> <li>• Moral Competence</li> <li>• Honesty</li> <li>• Courtesy</li> <li>• Sportsmanship</li> <li>• Respect</li> <li>• Valuing diversity</li> <li>• Conformity</li> </ul>
<p><b>Emotional self regulation</b></p> <ul style="list-style-type: none"> <li>• Emotional control</li> <li>• Self control</li> <li>• Relaxation</li> <li>• Stress Management</li> <li>• Control</li> <li>• Self-Talk</li> </ul>	<p><b><i>Emotional self regulation/Emotional Intelligence</i></b></p> <ul style="list-style-type: none"> <li>• Emotional control</li> <li>• Self control</li> <li>• Relaxation</li> <li>• Stress Management</li> <li>• Control</li> <li>• Ability to perform under pressure</li> </ul>

<ul style="list-style-type: none"> <li>• Ability to perform under pressure</li> <li>• Handle success and failure</li> <li>• Imagery</li> <li>• Concentration</li> <li>• Managing distractions</li> <li>• Dealing with Fatigue</li> <li>• Ability to cope with and control anxiety</li> <li>• Self Management</li> <li>• Ability to focus</li> </ul>	<ul style="list-style-type: none"> <li>• Handle success and failure</li> <li>• Dealing with Fatigue</li> <li>• Ability to cope with and control anxiety</li> <li>• Self Management</li> </ul>
<b>Leadership</b> <ul style="list-style-type: none"> <li>• Contribution</li> </ul>	<b>Leadership</b> <ul style="list-style-type: none"> <li>• Contribution</li> <li>• Communication</li> <li>• Inspiration</li> <li>• Feedback</li> <li>• Role model</li> <li>• Encouragement</li> </ul>
<b>Empathy</b> <ul style="list-style-type: none"> <li>• Caring</li> <li>• Emotional Competence</li> </ul>	<b>Empathy</b> <ul style="list-style-type: none"> <li>• Caring</li> <li>• Emotional Competence</li> </ul>
<b>Resilience</b> <ul style="list-style-type: none"> <li>• Overcoming adversity</li> <li>• Overcome setbacks</li> </ul>	<b>Resilience</b> <ul style="list-style-type: none"> <li>• Overcoming adversity</li> <li>• Overcome setbacks</li> </ul>
<b>Self-appraisal</b>	
<b>Mental Toughness</b>	

NB: Italics denotes uncertainty in the items but no ideas on how to address the uncertainty from the participant

### Removed Assets

- Courage
- Assertion
- Judgement
- Maintenance of physical health
- Self-Talk
- Imagery
- Concentration
- Managing distractions
- Ability to focus
- Mental Toughness



# Appendix 4

Participant Information and Informed Consent:  
Study 2

## Coach Influences on Positive Youth Development in Sport

### Participant Information Sheet

#### Main researcher contact details

**Name:** Julie Douglas  
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Ashby Road  
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#### Other researcher contact details

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**Address:** School of Sport, Exercise  
and Health Sciences  
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Leicestershire  
LE11 3TU  
**Telephone:** 01509 226342

**Name:** Dr. Antoinette Minniti  
**Email:** [Antoinette.minniti@ntu.ac.uk](mailto:Antoinette.minniti@ntu.ac.uk)  
**Address:** School of Science and Technology  
Nottingham Trent University  
Clifton  
NG 11 8NS  
**Telephone:** 0115 848 3918

#### What is the purpose of the study?

This study is investigating coach perceptions of and attitudes towards the psychological, social and emotional development of youth swimmers. It has long been considered that sport can be successfully used as a vehicle to promote the healthy and positive development of young people yet, to date, we have failed to understand if this is currently happening, how this may be happening and reasons as to why this may not be happening. This study is an exploratory study, designed to understand current practice with the aim of working towards providing information and developing educational tools to aid coaches in the integration of these skills into their coaching style.



**Who is doing this research?**

Julie Douglas is conducting this research. Julie is an ex-Irish International swimmer, with over 10 years of experience training and competing on the international circuit, Julie is also a BASES Accredited Sport Psychologist, with over 6 years of working with young athletes in this capacity. Julie is currently completing a PhD in sport psychology for which this research will form part of. She brings her combined sporting and academic expertise to the table in this study.

Julie is supervised by both Dr Chris Harwood and Dr Antoinette Minniti.

**Are there any exclusion criteria?**

This study is open to male and females coaches of all ages who coach age group, youth and senior swimmers.

**Once I take part, can I change my mind?**

Yes! After you have read this information and asked any questions you may have, you will be asked to complete an Informed Consent Form, however if at any time, before, during or after the focus group you wish to withdraw from the study please just contact the main investigator. You can withdraw at any time, for any reason and you will not be asked to explain your reasons for withdrawing.

**Will I be required to attend any sessions and where will these be?**

No, the completion of this questionnaire will form your only commitment to this study.

**How long will it take?**

The questionnaire is expected to last between 30 and 40 minutes to complete.

**Is there anything I need to do beforehand?**

No.

**Is there anything I need to bring with me?**

No.

**What will I be asked to do?**

You will have to answer some questions about your thoughts, feelings and experiences in relation to swimming coaching. You are encouraged to answer openly and honestly. You are not obliged to answer any question you are not comfortable with. All responses will be kept confidential.

**What personal information will be required from me?**

Name, level of coaching certification currently held, age and ability of swimmers currently coaching and number of years coaching.

**Are there any risks in participating?**

There are no expected risks of participation in this study.

**Will my taking part in this study be kept confidential?**

Yes. All electronically stored data will be stored in a password protected file and identified only by a unique reference number. Any hard copies of data collected will be stored in a locked cabinet in the researcher's office.

**What will happen to the results of the study?**

They will be collectively used to investigate coach perceptions and attitudes towards psychosocial development of young athletes. The results may be presented at conferences and in journal articles and will be used as evidence of PhD research, however, participant confidentiality is guaranteed at all times.

**What do I get for participating?**

There are no incentives offered for participation but a summary of findings from the study will be provided for distribution to those interested.

**I have some more questions who should I contact?**

Please contact Julie Douglas in the first instance, contact details on the first page. Contact details of additional researchers are provided should you wish to speak with someone else.

**What if I am not happy with how the research was conducted?**

If you are unhappy with any part of the research process please inform the researchers and they will endeavour to deal with your problem. However, Loughborough University does have a policy relating to Research Misconduct and Whistle Blowing which is available online at [http://www.lboro.ac.uk/admin/committees/ethical/Whistleblowing\(2\).htm](http://www.lboro.ac.uk/admin/committees/ethical/Whistleblowing(2).htm) which you are free to pursue at any time.

## Coach Influences on Positive Youth Development in Sport

### INFORMED CONSENT FORM

(to be completed after Participant Information Sheet has been read)

The purpose and details of this study have been explained to me. I understand that this study is designed to further scientific knowledge and that all procedures have been approved by the Loughborough University Ethical Advisory Committee.

I have read and understood the information sheet and this consent form.

I have had an opportunity to ask questions about my participation.

I understand that I am under no obligation to take part in the study.

I understand that I have the right to withdraw from this study at any stage for any reason, and that I will not be required to explain my reasons for withdrawing.

I understand that all the information I provide will be treated in strict confidence and will be kept anonymous and confidential to the researchers unless (under the statutory obligations of the agencies which the researchers are working with), it is judged that confidentiality will have to be breached for the safety of the participant or others.

I agree to participate in this study.

Your name

---

Your signature

---

Signature of investigator

---

Date

---

# Appendix 5

Psychology for Swimming Questionnaire: Study 2

An online version of this survey is also available at <http://www.surveymonkey.com/s/GH2C3KG>.

### Psychology for Swimming Questionnaire

**Instructions:** This questionnaire requires you to consider your experiences as a coach of age group and/or youth swimmers. You will be asked to consider five main questions in relation to a list of positive qualities and characteristics, referred to as assets. Please answer all questions as to how you feel the **majority of the time**, coaching the **majority of your swimmers**. Please note that all answers will be treated in the strictest confidence. Personal details will only be used for contact purposes. **Please answer honestly.** Please answer the questions exactly as instructed to and only in reference to the information provided, for example, if you feel a word to mean something different than how it is defined here, please answer as to **how it is defined here** and not in regards to your own opinion of what is meant by that word.

#### Personal and Career Details

Name: .....

Male / Female (please delete as appropriate)

Age:.....

Email: .....

Telephone: .....

Coach Certification Level:.....

Official Position in Club: .....

Years of Coaching Experience: .....

Approximately how many swimmers are you responsible for?: .....

- What age of swimmer do you *primarily* coach?:
- Age group (13 and under)
  - Youth (female 14-16 / male 14-18)
  - Senior (female over 16 / male over 18)

How many hours per week do you spend coaching? .....

How many hours per week do you have contact with the swimmers in general:  
a) at the pool: .....  
b) away from the pool: .....

Is swim coaching your main job?: Yes   
No

Do you receive any remuneration for your swim coaching?: Yes   
No

An online version of this survey is also available at <http://www.surveymonkey.com/s/GH2C3KG>.

Please provide a breakdown, *in percentage values*, of your *current coaching role* in regards to *time spent* developing each of the following areas in your swimmers:

Technical development:	<input type="text"/>
Tactical/strategic development:	<input type="text"/>
Development of physical fitness:	<input type="text"/>
Psychological skill development:	<input type="text"/>
Nutritional support:	<input type="text"/>
	<b>100%</b>

Is the above breakdown representative of what you *believe* your role should look like?    Yes      
No   

If not, please:

a) briefly suggest why not: .....

b) provide a breakdown, *in percentage values*, of your *ideal perceived coaching role* in regards to *time spent* developing each of the following areas in your swimmers:

Technical development:	<input type="text"/>
Tactical/Strategic development:	<input type="text"/>
Development of physical fitness:	<input type="text"/>
Psychological skill development:	<input type="text"/>
Nutritional support:	<input type="text"/>
	<b>100%</b>

An online version of this survey is also available at <http://www.surveymonkey.com/s/GH2C3KG>.

Please read each asset and its definition carefully and then mark on the scale below how **important** you feel it is for your swimmers to **possess** this asset.

By **importance**, we are asking you to consider how essential to a young person's **personal development** for life **outside of swimming**, you feel it is for them to develop each asset listed.

<b>Psychological Asset with Definition</b>	<b>Not Important At All</b>	<b>A little Important</b>	<b>Fairly Important</b>	<b>Important</b>	<b>Very Important</b>
<b>SELF PERCEPTIONS</b>					
<i>Perceived Sport Competence</i> Positive beliefs about capability or skill in swimming	1	2	3	4	5
<i>Self-Esteem</i> Overall general self-worth	1	2	3	4	5
<i>Clear and Positive Identity</i> A clear sense of self characterised by high self awareness and a clear and positive purpose in life	1	2	3	4	5
<b>BEHAVIOURAL SKILLS</b>					
<i>Organisation</i> The ability to manage and take responsibility for self in order to achieve planned goals	1	2	3	4	5
<i>Discipline</i> Choosing daily behaviours that are in line with achieving planned goals	1	2	3	4	5
<i>Self-Appraisal</i> The ability to examine and monitor individual strengths and areas for improvement	1	2	3	4	5
<b>SOCIAL SKILLS</b>					
<i>Communication</i> The ability to listen, give and receive feedback and to appropriately interpret and/or respond to non-verbal behaviour, for example, body language	1	2	3	4	5
<i>Conflict Resolution</i> The ability to resolve disagreements via negotiation and compromise	1	2	3	4	5
<i>Cooperation</i> The ability to work with and help others, generally towards achieving a common goal	1	2	3	4	5

An online version of this survey is also available at <http://www.surveymonkey.com/s/GH2C3KG>.

<b><i>Leadership</i></b> The ability to motivate and encourage others and to act as a positive role model through the expression of desirable behaviours	1	2	3	4	5
<b>APPROACH CHARACTERISTICS</b>					
<b><i>Character</i></b> A respect both for others and for set rules and boundaries along with an understanding of the difference between right and wrong and the importance of being honest, even when it is not easy	1	2	3	4	5
<b><i>Positive attitude</i></b> A tendency to be hopeful and optimistic about future outcomes	1	2	3	4	5
<b><i>Motivation</i></b> A self-directed tendency to pursue high personal standards with an emphasis on the value of effort, mastery of skills, self-improvement and competitiveness	1	2	3	4	5
<b><i>Resilience</i></b> The ability to bounce back and to overcome obstacles	1	2	3	4	5
<b>EMOTIONAL COMPETENCE</b>					
<b><i>Empathy</i></b> The ability to share and show understanding for someone else's feelings, experiences or viewpoints by imagining what it would be like in their situation	1	2	3	4	5
<b><i>Emotional self-regulation</i></b> The ability to control both positive and negative emotions in order to prevent them from interfering with attention and performance and to learn to use them in a constructive manner	1	2	3	4	5
<b><i>Connection</i></b> The ability to care for and bond with others in order to create meaningful relationships and develop a sense of belonging	1	2	3	4	5



An online version of this survey is also available at <http://www.surveymonkey.com/s/GH2C3KG>.

Please read each asset and its definition carefully and then mark on the scale below how **relevant** you think these assets are **to swimming and swimming performance**. By **relevance to swimming**, we are asking you to consider how important you consider each of these assets to be in the **development of a successful swimmer**.

<b>Psychological Asset with Definition</b>	<b>Not Relevant At All</b>	<b>A little Relevant</b>	<b>Fairly Relevant</b>	<b>Relevant</b>	<b>Very Relevant</b>
<b>SELF PERCEPTIONS</b>					
<i>Perceived Sport Competence</i> Positive beliefs about capability or skill in swimming	1	2	3	4	5
<i>Self-Esteem</i> Overall general self-worth	1	2	3	4	5
<i>Clear and Positive Identity</i> A clear sense of self characterised by high self awareness and a clear and positive purpose in life	1	2	3	4	5
<b>BEHAVIOURAL SKILLS</b>					
<i>Organisation</i> The ability to manage and take responsibility for self in order to achieve planned goals	1	2	3	4	5
<i>Discipline</i> Choosing daily behaviours that are in line with achieving planned goals	1	2	3	4	5
<i>Self-Appraisal</i> The ability to examine and monitor individual strengths and areas for improvement	1	2	3	4	5
<b>SOCIAL SKILLS</b>					
<i>Communication</i> The ability to listen, give and receive feedback and to appropriately interpret and/or respond to non-verbal behaviour, for example, body language	1	2	3	4	5
<i>Conflict Resolution</i> The ability to resolve disagreements via negotiation and compromise	1	2	3	4	5
<i>Cooperation</i> The ability to work with and help others, generally towards achieving a common goal	1	2	3	4	5

An online version of this survey is also available at <http://www.surveymonkey.com/s/GH2C3KG>.

<b><i>Leadership</i></b> The ability to motivate and encourage others and to act as a positive role model through the expression of desirable behaviours	1	2	3	4	5
<b>APPROACH CHARACTERISTICS</b>					
<b><i>Character</i></b> A respect both for others and for set rules and boundaries along with an understanding of the difference between right and wrong and the importance of being honest, even when it is not easy	1	2	3	4	5
<b><i>Positive attitude</i></b> A tendency to be hopeful and optimistic about future outcomes	1	2	3	4	5
<b><i>Motivation</i></b> A self-directed tendency to pursue high personal standards with an emphasis on the value of effort, mastery of skills, self-improvement and competitiveness	1	2	3	4	5
<b><i>Resilience</i></b> The ability to bounce back and to overcome obstacles	1	2	3	4	5
<b>EMOTIONAL COMPETENCE</b>					
<b><i>Empathy</i></b> The ability to share and show understanding for someone else's feelings, experiences or viewpoints by imagining what it would be like in their situation	1	2	3	4	5
<b><i>Emotional self-regulation</i></b> The ability to control both positive and negative emotions in order to prevent them from interfering with attention and performance and to learn to use them in a constructive manner	1	2	3	4	5
<b><i>Connection</i></b> The ability to care for and bond with others in order to create meaningful relationships and develop a sense of belonging	1	2	3	4	5

An online version of this survey is also available at <http://www.surveymonkey.com/s/GH2C3KG>.

Please read each asset and its definition carefully and then mark on the scale below how **important** you feel it is for **you as a coach** to **develop each asset**. Here we are asking you to report to what degree you consider the development of these assets in young swimmers to be a **part of your role as a coach**.

<b>Psychological Asset with Definition</b>	<b>Not Important At All</b>	<b>A little Important</b>	<b>Fairly Important</b>	<b>Important</b>	<b>Very Important</b>
<b>SELF PERCEPTIONS</b>					
<i>Perceived Sport Competence</i> Positive beliefs about capability or skill in swimming	1	2	3	4	5
<i>Self-Esteem</i> Overall general self-worth	1	2	3	4	5
<i>Clear and Positive Identity</i> A clear sense of self characterised by high self awareness and a clear and positive purpose in life	1	2	3	4	5
<b>BEHAVIOURAL SKILLS</b>					
<i>Organisation</i> The ability to manage and take responsibility for self in order to achieve planned goals	1	2	3	4	5
<i>Discipline</i> Choosing daily behaviours that are in line with achieving planned goals	1	2	3	4	5
<i>Self-Appraisal</i> The ability to examine and monitor individual strengths and areas for improvement	1	2	3	4	5
<b>SOCIAL SKILLS</b>					
<i>Communication</i> The ability to listen, give and receive feedback and to appropriately interpret and/or respond to non-verbal behaviour, for example, body language	1	2	3	4	5
<i>Conflict Resolution</i> The ability to resolve disagreements via negotiation and compromise	1	2	3	4	5
<i>Cooperation</i> The ability to work with and help others, generally towards achieving a common goal	1	2	3	4	5

An online version of this survey is also available at <http://www.surveymonkey.com/s/GH2C3KG>.

<b><i>Leadership</i></b> The ability to motivate and encourage others and to act as a positive role model through the expression of desirable behaviours	1	2	3	4	5
<b>APPROACH CHARACTERISTICS</b>					
<b><i>Character</i></b> A respect both for others and for set rules and boundaries along with an understanding of the difference between right and wrong and the importance of being honest, even when it is not easy	1	2	3	4	5
<b><i>Positive attitude</i></b> A tendency to be hopeful and optimistic about future outcomes	1	2	3	4	5
<b><i>Motivation</i></b> A self-directed tendency to pursue high personal standards with an emphasis on the value of effort, mastery of skills, self-improvement and competitiveness	1	2	3	4	5
<b><i>Resilience</i></b> The ability to bounce back and to overcome obstacles	1	2	3	4	5
<b>EMOTIONAL COMPETENCE</b>					
<b><i>Empathy</i></b> The ability to share and show understanding for someone else's feelings, experiences or viewpoints by imagining what it would be like in their situation	1	2	3	4	5
<b><i>Emotional self-regulation</i></b> The ability to control both positive and negative emotions in order to prevent them from interfering with attention and performance and to learn to use them in a constructive manner	1	2	3	4	5
<b><i>Connection</i></b> The ability to care for and bond with others in order to create meaningful relationships and develop a sense of belonging	1	2	3	4	5

An online version of this survey is also available at <http://www.surveymonkey.com/s/GH2C3KG>.

Please read each asset and its definition carefully and then estimate the **amount of attention**, on average, **you give to the development of each asset in your swimmers within your coaching activities**. Please consider both **structured and unstructured activities**. Please report this as accurately as possible and think about your interactions and work with your squad **as a whole**.

<b>Psychological Asset with Definition</b>	<b>No attention at all</b>	<b>A little attention</b>	<b>A fair amount of attention</b>	<b>A lot of attention</b>	<b>A great deal of attention</b>
<b>SELF PERCEPTIONS</b>					
<i>Perceived Sport Competence</i> Positive beliefs about capability or skill in swimming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Self-Esteem</i> Overall general self-worth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Clear and Positive Identity</i> A clear sense of self characterised by high self awareness and a clear and positive purpose in life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>BEHAVIOURAL SKILLS</b>					
<i>Organisation</i> The ability to manage and take responsibility for self in order to achieve planned goals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Discipline</i> Choosing daily behaviours that are in line with achieving planned goals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Self-Appraisal</i> The ability to examine and monitor individual strengths and areas for improvement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>SOCIAL SKILLS</b>					
<i>Communication</i> The ability to listen, give and receive feedback and to appropriately interpret and/or respond to non-verbal behaviour, for example, body language	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Conflict Resolution</i> The ability to resolve disagreements via negotiation and compromise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Cooperation</i> The ability to work with and help others, generally towards achieving a common goal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

An online version of this survey is also available at <http://www.surveymonkey.com/s/GH2C3KG>.

<b><i>Leadership</i></b> The ability to motivate and encourage others and to act as a positive role model through the expression of desirable behaviours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>APPROACH CHARACTERISTICS</b>					
<b><i>Character</i></b> A respect both for others and for set rules and boundaries along with an understanding of the difference between right and wrong and the importance of being honest, even when it is not easy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b><i>Positive attitude</i></b> A tendency to be hopeful and optimistic about future outcomes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b><i>Motivation</i></b> A self-directed tendency to pursue high personal standards with an emphasis on the value of effort, mastery of skills, self-improvement and competitiveness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b><i>Resilience</i></b> The ability to bounce back and to overcome obstacles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>EMOTIONAL COMPETENCE</b>					
<b><i>Empathy</i></b> The ability to share and show understanding for someone else's feelings, experiences or viewpoints by imagining what it would be like in their situation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b><i>Emotional self-regulation</i></b> The ability to control both positive and negative emotions in order to prevent them from interfering with attention and performance and to learn to use them in a constructive manner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b><i>Connection</i></b> The ability to care for and bond with others in order to create meaningful relationships and develop a sense of belonging	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

An online version of this survey is also available at <http://www.surveymonkey.com/s/GH2C3KG>.

**Please add any additional comments you may have on any part of the questionnaire here:**

.....

.....

.....

**Thank you for your time, it is hugely appreciated.**



# Appendix 6

Participant Information Sheet: Study 3



Dear Parent/Guardian

My name is Julie Douglas and I am an ex-International level swimmer and currently completing a PhD jointly funded by Loughborough University and Nottingham Trent University. I am conducting a study which is supported by the Amateur Swimming Association (ASA) and British Swimming parental perceptions of and attitudes towards the psychological, social and emotional development of swimmers, along with attempting to understand the relationship between these values and perceived parenting style and social support.

If you have one or more children regularly participating in a swimming club in the U.K. we would like to invite you to participate in this research. It is up to you to decide whether you take part in this study. You are free to withdraw from the study at any time and do not have to give a reason. A decision not to take part or to withdraw at any time will not penalise you. The completion of the questionnaire will be taken as your consent for participation. You will have to respond to questions about your thoughts, feelings and experiences in relation to your role as a sport parent. You are encouraged to answer openly and honestly. All answers are kept completely confidential. The questionnaire will take approximately 20 to 25 minutes to complete.

Thank you for taking the time to consider participation in this study. The findings should have significant and practical implications to both coach and parent education initiatives and consequently for athlete enjoyment and satisfaction levels in sport. You will therefore be making a valuable and much appreciated contribution towards this study. Your completion of the questionnaire will be taken as consent to participate.

If you have any concerns regarding this study or would simply like to find out more information, please do not hesitate to contact me on 07736 939549 or email [J.P.Douglas@lboro.ac.uk](mailto:J.P.Douglas@lboro.ac.uk). Alternatively, you may contact one of the senior investigators Dr. Chris Harwood (01509 226342; [C.G.Harwood@lboro.ac.uk](mailto:C.G.Harwood@lboro.ac.uk)) or Dr. Antoinette Minniti (0115 848 3918; [Antoinette.minniti@ntu.ac.uk](mailto:Antoinette.minniti@ntu.ac.uk)).

With best wishes

Julie Douglas

## **Coach and Parent Influences on Positive Youth Development in Sport**

### **INFORMED CONSENT FORM**

**(to be completed after Participant Information Sheet has been read)**

The purpose and details of this study have been explained to me. I understand that this study is designed to further scientific knowledge and that all procedures have been approved by the Loughborough University Ethical Advisory Committee.

I have read and understood the information sheet and this consent form.

I have had an opportunity to ask questions about my participation.

I understand that I am under no obligation to take part in the study.

I understand that I have the right to withdraw from this study at any stage for any reason, and that I will not be required to explain my reasons for withdrawing.

I understand that all the information I provide will be treated in strict confidence and will be kept anonymous and confidential to the researchers unless (under the statutory obligations of the agencies which the researchers are working with), it is judged that confidentiality will have to be breached for the safety of the participant or others.

I agree to participate in this study.

Your name

---

Your signature

---

Signature of investigator

---

Date

---



# Appendix 7

Psychology for Swimming Questionnaire: Study 3

Dear Parent/Guardian

My name is Julie Douglas and I am an ex-International level swimmer and currently completing a PhD jointly funded by Loughborough University and Nottingham Trent University. I am conducting a study which is supported by the Amateur Swimming Association (ASA) and British Swimming investigating parental perceptions of and attitudes towards the psychological, social and emotional development of swimmers, along with attempting to understand the relationship between these values and perceived parenting style and social support.

If you have one or more children regularly participating in a swimming club in the U.K. we would like to invite you to participate in this research. It is up to you to decide whether you take part in this study. You are free to withdraw from the study at any time and do not have to give a reason. A decision not to take part or to withdraw at any time will not penalise you. The completion of the questionnaire will be taken as your consent for participation. You will have to respond to questions about your thoughts, feelings and experiences in relation to your role as a sport parent. You are encouraged to answer openly and honestly. All answers are kept completely confidential. The questionnaire will take approximately 20 to 25 minutes to complete.

Thank you for taking the time to consider participation in this study. The findings should have significant and practical implications to both coach and parent education initiatives and consequently for athlete enjoyment and satisfaction levels in sport. You will therefore be making a valuable and much appreciated contribution towards this study. Your completion of the questionnaire will be taken as consent to participate.

If you have any concerns regarding this study or would simply like to find out more information, please do not hesitate to contact me on 07736 939549 or email [J.P.Douglas@lboro.ac.uk](mailto:J.P.Douglas@lboro.ac.uk). Alternatively, you may contact one of the senior investigators Dr. Chris Harwood (01509 226342; [C.G.Harwood@lboro.ac.uk](mailto:C.G.Harwood@lboro.ac.uk)) or Dr. Antoinette Minniti (0115 848 3918; [Antoinette.minniti@ntu.ac.uk](mailto:Antoinette.minniti@ntu.ac.uk)).

With best wishes

Julie Douglas

Office Use Only:

Participant Number: \_\_\_\_\_

## Psychology for Swimming Questionnaire

### Instructions

This questionnaire should be completed by the parent who is **most involved** in the swimming environment and with whom the child has the **most interaction in regards to their swimming**. By this, it is considered that this will be the parent who takes the child to and from training and competition most often and who attends and watches training and competition most often. It is also considered that this will be the parent who interacts most with the coach.

For the purpose of this questionnaire, you should keep **your child that is involved in swimming at the forefront of your mind**. If you have **more than one child participating and training in swimming, please think only of one of your children when answering the questions**. If possible, the child you think of when answering these questions should be **12 years of age or older**. If you have more than one child in this age range, please choose the child who is **most involved** in swimming. If you have more than one child in this category please choose whichever child you want but please think only of this child throughout the questionnaire and please note their characteristics accurately when asked. Take some time now to consider which child you will be thinking of when answering this questionnaire.

This questionnaire requires you to consider your experiences as the most involved swimming parent in your family unit. You will be asked to consider a number of questions in relation to a list of positive qualities and characteristics, referred to as assets. Whilst we acknowledge that parenting behaviours may have changed over the course of your child's swimming career, please answer all questions as to how you **currently** feel the **majority of the time** when interacting with your child.

Once you have completed your questionnaire, please give the athlete questionnaire to the child you were thinking about for them to **complete alone**. Please only do this if the child you were thinking about is **12 years of age or older**.

Please note that all answers will be treated in the strictest confidence. Personal details will only be used for contact purposes and then only if consent is given to do so. **Please answer honestly**. Please answer the questions exactly as instructed to and only in reference to the information provided, for example, if you feel a word to mean something different than how it is defined here, please answer as to **how it is defined here** and not in regards to your own opinion of what is meant by that word. **Thank you in advance for helping with this valuable research project**.

**Personal Details**

Name: .....

Male / Female (please delete as appropriate)

Age:.....

Email: .....

Telephone: .....

**Swimmer/Child Details**

What gender is the child you will be thinking about when answering this questionnaire:          Male           Female

How old is the child you will be thinking about when answering this questionnaire:          \_\_\_\_\_ Years

How many hours per week does your child train for swimming? \_\_\_\_\_ Hours

Current level of participation of the child you will be thinking about when answering this questionnaire:

Club

County

National Age Group/Youth

National Senior

International Junior

International Senior

Please indicate what gender your child's main coach is: Male           Female

Below are a list of psychological assets and their definitions. Please read each asset and its definition carefully and completely at least once before marking your answer for each of the questions below in the appropriate column. For each question please choose a number between 1 and 5 to indicate your response where

1 = Not at all

2 = A little

3 = Fairly

4 = Quite a lot

5 = Very

#### **Column A**

For each asset, please indicate how **important** you feel it is for your child to have this asset. By **importance**, we are asking you to consider how necessary this asset is to a young person's **personal development** for life **outside of swimming**. Please choose a number between 1 and 5 as noted above to indicate your response and place this in **column A**.

#### **Column B**

For each asset, please indicate how **relevant** you think these assets are **to swimming and swimming performance**. By **relevance to swimming**, we are asking you to consider how important you consider each of these assets to be in the **development of a successful swimmer**. Please choose a number between 1 and 5 as noted above to indicate your response and place this in **column B**.

#### **Column C**

For each asset, please indicate how **important** you feel it is for **you as a parent to develop each asset in your child**. Here we are asking you to report to what degree you consider the development of these assets in your child to be a **part of your role as a parent**. Please choose a number between 1 and 5 as noted above to indicate your response and place this in **column C**.

#### **Column D**

For each asset, please indicate the **amount of attention**, on average, **you give to the development of each asset in your child within your parenting activities**. Please consider both **structured and unstructured activities**. Please report this as accurately as possible and think about your interactions with your child **as a whole**. Please choose a number between 1 and 5 as noted above to indicate your response and place this in **column D**.

	A	B	C	D
<b>Psychological Asset with Definition</b>	<b>Importance for personal development outside of swimming</b>	<b>Relevance to swimming and swimming performance</b>	<b>Part of your role to develop</b>	<b>Amount of attention given to developing the asset</b>
<b>SELF PERCEPTIONS</b>				
<i>Perceived Sport Competence</i> Positive beliefs about capability or skill in swimming				
<i>Self-Esteem</i> Overall general self-worth				
<i>Clear and Positive Identity</i> A clear sense of self characterised by high self awareness and a clear and positive purpose in life				
<b>BEHAVIOURAL SKILLS</b>				
<i>Organisation</i> The ability to manage and take responsibility for self in order to achieve planned goals				



<b>Psychological Asset with Definition</b>	<b>Importance for personal development outside of swimming</b>	<b>Relevance to swimming and swimming performance</b>	<b>Part of your role to develop</b>	<b>Amount of attention given to developing the asset</b>
<b><i>Discipline</i></b> Choosing daily behaviours that are in line with achieving planned goals				
<b><i>Self-Appraisal</i></b> The ability to examine and monitor individual strengths and areas for improvement				
<b>SOCIAL SKILLS</b>				
<b><i>Communication</i></b> The ability to listen, give and receive feedback and to appropriately interpret and/or respond to non-verbal behaviour, for example, body language				
<b><i>Conflict Resolution</i></b> The ability to resolve disagreements via negotiation and compromise				
<b><i>Cooperation</i></b> The ability to work with and help others, generally towards achieving a common goal				
<b><i>Leadership</i></b> The ability to motivate and encourage others and to act as a positive role model through the expression of desirable behaviours				
<b>APPROACH CHARACTERISTICS</b>				
<b><i>Character</i></b> A respect both for others and for set rules and boundaries along with an understanding of the difference between right and wrong and the importance of being honest, even when it is not easy				
<b><i>Positive attitude</i></b> A tendency to be hopeful and optimistic about future outcomes				
<b><i>Motivation</i></b> A self-directed tendency to pursue high personal standards with an emphasis on the value of effort, mastery of skills, self-improvement and competitiveness				

Psychological Asset with Definition	Importance for personal development outside of swimming	Relevance to swimming and swimming performance	Part of your role to develop	Amount of attention given to developing the asset
<i>Resilience</i> The ability to bounce back and to overcome obstacles				
<b>EMOTIONAL COMPETENCE</b>				
<i>Empathy</i> The ability to share and show understanding for someone else's feelings, experiences or viewpoints by imagining what it would be like in their situation				
<i>Emotional self-regulation</i> The ability to control both positive and negative emotions in order to prevent them from interfering with attention and performance and to learn to use them in a constructive manner				
<i>Connection</i> The ability to care for and bond with others in order to create meaningful relationships and develop a sense of belonging				

The following questions explore the different **parenting behaviours** that you may or may not employ in **developing your relationship with your child and the environment in which they interact with you**. Think carefully about your parenting behaviours **in general**. Indicate by circling your response, the degree to which each statement is true or not true for you, in regards to **your interaction with your child in their life in general**. There are no right or wrong answers and you will not be judged on how you answer the questions. **Please answer honestly.**

	Not at all true	1	2	3	Somewhat true	4	5	6	Very true	7
1. I seem to know how my child feels about things.	1	2	3	4	5	6	7			
2. I try to tell my child how to run their life.	1	2	3	4	5	6	7			
3. I find time to talk with my child.	1	2	3	4	5	6	7			
4. I accept my child and like him/her as they are.	1	2	3	4	5	6	7			
5. Whenever possible, I allow my child to choose what to do.	1	2	3	4	5	6	7			
6. I don't think of my child often.	1	2	3	4	5	6	7			
7. I clearly convey my love for my child.	1	2	3	4	5	6	7			
8. I listen to my child's opinion or perspective when I've got a problem.	1	2	3	4	5	6	7			
9. I spend a lot of time with my child.	1	2	3	4	5	6	7			
10. I make my child feel very special.	1	2	3	4	5	6	7			

	Not at all true			Somewhat true			Very true
	1	2	3	4	5	6	7
11. I allow my child to decide things for his/herself.	1	2	3	4	5	6	7
12. I am often too busy to attend to my child.	1	2	3	4	5	6	7
13. I am often disapproving and unaccepting of my child.	1	2	3	4	5	6	7
14. I insist upon my child doing things my way.	1	2	3	4	5	6	7
15. I am not very involved with my child's concerns.	1	2	3	4	5	6	7
16. I am typically happy to see my child.	1	2	3	4	5	6	7
17. I am usually willing to consider things from my child's point of view.	1	2	3	4	5	6	7
18. I put time and energy into helping my child.	1	2	3	4	5	6	7
19. I help my child to choose their own direction.	1	2	3	4	5	6	7
20. I seem to be disappointed in my child a lot.	1	2	3	4	5	6	7
21. I am not very sensitive to many of my child's needs.	1	2	3	4	5	6	7

Below is a list of items referring to the types of help and support you may give your child **in relation to their swimming**. Please indicate to what extent you feel you make these types of support **available to your child in swimming**.

**To what extent are you someone...**

	Not at all	Slightly	Moderately	Considerably	Extremely
1. who provides your child with comfort and security?	1	2	3	4	5
2. who helps with travel to training and competitions?	1	2	3	4	5
3. who gives your child tactical advice?	1	2	3	4	5
4. who enhances your child's self-esteem?	1	2	3	4	5
5. who will always be there for your child?	1	2	3	4	5
6. who instils your child with the confidence to deal with pressure?	1	2	3	4	5
7. who helps your child with tasks to leave them free to concentrate?	1	2	3	4	5
8. who shows concern for your child?	1	2	3	4	5
9. who gives your child advice when they're performing poorly?	1	2	3	4	5
10. who cares for your child?	1	2	3	4	5
11. who reinforces the positives?	1	2	3	4	5
12. who gives your child constructive criticism?	1	2	3	4	5
13. who boosts your child's sense of competence?	1	2	3	4	5
14. who does things for your child at competitions and matches?	1	2	3	4	5
15. who gives your child advice about performing in competitive situations?	1	2	3	4	5
16. who helps your child organise and plan their competitions/races?	1	2	3	4	5

Thank you for taking the time to complete this questionnaire. Please add any additional comments you may have on any part of the questionnaire here:

.....

.....

**Thank you for your time, it is hugely appreciated. Please remember to give your child their questionnaire for them to complete alone.**



# Appendix 8

Participant Information Sheet: Study 4

Dear Athlete

My name is Julie Douglas and I am an ex-International level swimmer and currently completing a PhD jointly funded by Loughborough University and Nottingham Trent University. I am conducting a study which is supported by the Amateur Swimming Association (ASA) and British Swimming investigating the ways in which parents and coaches interact with their children and athletes within swimming and how these interactions may influence your psychosocial development.

If you are registered as a competitive swimmer with a registered club within the UK and are 12 years of age or above, we would like to invite you to participate in this research. It is up to you to decide whether you take part in this study. You are free to withdraw from the study at any time and do not have to give a reason. A decision not to take part or to withdraw at any time will not penalise you. The completion of the questionnaire will be taken as your consent for participation. You will have to respond to questions about your thoughts, feelings and experiences in relation to your interactions with your mum or dad and coach both outside and inside of swimming. You are encouraged to answer openly and honestly, there are no right or wrong answers. All answers are kept completely confidential. The questionnaire will take approximately 15 to 20 minutes to complete.

If you have any concerns regarding this study or would simply like to find out more information, please do not hesitate to contact me on 07736 939549 or email [J.P.Douglas@lboro.ac.uk](mailto:J.P.Douglas@lboro.ac.uk). Alternatively, you may contact one of the senior investigators Dr. Chris Harwood (01509 226342; [C.G.Harwood@lboro.ac.uk](mailto:C.G.Harwood@lboro.ac.uk)) or Dr. Antoinette Minniti (0115 848 3918; [Antoinette.minniti@ntu.ac.uk](mailto:Antoinette.minniti@ntu.ac.uk)).

Thank you for taking the time to consider participation in this study. The findings should have significant and practical implications to both coach and parent education initiatives and consequently for athlete enjoyment and satisfaction levels in sport. You will therefore be making a valuable and much appreciated contribution towards this study. If you are under 18 yrs of age please give this sheet to your parents to sign on your behalf.

With best wishes

Julie Douglas

---

I have read and understood this information sheet and have had an opportunity to ask questions about my child's participation. I agree to my child's participation in this study.

\_\_\_\_\_ Parent/Guardian

\_\_\_\_\_ Date



# Appendix 9

Athlete Questionnaire: Study 4

Office Use Only:

Participant Number: \_\_\_\_\_

### Athlete Questionnaire Instructions

This questionnaire is in four parts:

The first part asks you to think about the **parent** who is **most involved in your swimming**. It will most likely be the parent who gave you this questionnaire. **Please answer the questions in the first section of this questionnaire thinking about this parent.** If there is another adult who is most involved in your swimming and living in your house (for example, a stepmother or father) then please answer the questions about that person. The second part of the questionnaire will ask you to think about your **coach**. If you have more than one coach, please think about the coach **with whom you spend the most time** in swimming. In the third part of the questionnaire, we just want to understand a little about how you think about swimming. The fourth part asks you to tell us some basic information about you.

Please read the questions carefully and circle the answer that best describes how you feel right now. **There are no right or wrong answers. Please answer honestly.** Your responses will be kept anonymous and completely confidential.

#### PART ONE

Please answer the following questions thinking about your interaction with your **parent** in your life **in general**.

		Not at all true			Some what true			Very true
1.	My parent seems to know how I feel about things.	1	2	3	4	5	6	7
2.	My parent tries to tell me how to run my life.	1	2	3	4	5	6	7
3.	My parent finds time to talk with me.	1	2	3	4	5	6	7
4.	My parent accepts me and likes me as I am.	1	2	3	4	5	6	7
5.	My parent, whenever possible, allows me to choose what to do	1	2	3	4	5	6	7
6.	My parent doesn't seem to think of me often.	1	2	3	4	5	6	7
7.	My parent clearly conveys their love for me.	1	2	3	4	5	6	7
8.	My parent listens to my opinion or perspective when I've got a problem.	1	2	3	4	5	6	7
9.	My parent spends a lot of time with me.	1	2	3	4	5	6	7
10.	My parent makes me feel very special.	1	2	3	4	5	6	7
11.	My parent allows me to decide things for myself.	1	2	3	4	5	6	7
12.	My parent often seems too busy to attend to me.	1	2	3	4	5	6	7
13.	My parent is often disapproving and unaccepting of me.	1	2	3	4	5	6	7
14.	My parent insists upon my doing things their way.	1	2	3	4	5	6	7
15.	My parent is not very involved with my concerns.	1	2	3	4	5	6	7
16.	My parent is typically happy to see me.	1	2	3	4	5	6	7
17.	My parent is usually willing to consider things from my point of view.	1	2	3	4	5	6	7



		Not at all true	1	2	3	Some what true	4	5	6	7	Very true
18.	My parent puts time and energy into helping me.	1	2	3	4	5	6	7			
19.	My parent helps me to choose my own direction.	1	2	3	4	5	6	7			
20.	My parent seems to be disappointed in me a lot.	1	2	3	4	5	6	7			
21.	My parent isn't very sensitive to many of my needs.	1	2	3	4	5	6	7			

Below is a list of items referring to the types of help and support your parent may give you in relation to your swimming. Please indicate to what extent you have these types of support **available to you** from your parent. It is important to note that you may not need, want or receive any of this support currently but we are asking what support you think is available from your parent should you ever need or want it.

**To what extent is your parent someone...**

		Not at all	Slightly	Moderately	Considerably	Extremely
1.	who provides you with comfort and security?	1	2	3	4	5
2.	who helps with travel to training and competitions?	1	2	3	4	5
3.	who gives you tactical advice?	1	2	3	4	5
4.	who enhances your self-esteem?	1	2	3	4	5
5.	who will always be there for you?	1	2	3	4	5
6.	who instills you with the confidence to deal with pressure?	1	2	3	4	5
7.	who helps with tasks to leave you free to concentrate?	1	2	3	4	5
8.	who shows concern for you?	1	2	3	4	5
9.	who gives you advice when you're performing poorly?	1	2	3	4	5
10.	who cares for you?	1	2	3	4	5
11.	who reinforces the positives?	1	2	3	4	5
12.	who gives you constructive criticism?	1	2	3	4	5
13.	who boosts your sense of competence?	1	2	3	4	5
14.	who does things for you at competitions and matches?	1	2	3	4	5

		Not at all	Slightly	Moderately	Considerably	Extremely
15.	who gives you advice about performing in competitive situations?	1	2	3	4	5
16.	who helps you organise and plan your competitions/races?	1	2	3	4	5

## PART TWO

This questionnaire contains items that are related to your experience with your coach. Coaches have different styles in dealing with athletes and we would like to know more about how you have felt about your encounters with your coach. Please answer the following questions thinking about your interaction with your **coach in swimming** and remember to **answer honestly**.

		Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
1.	I feel that my coach provides me with choices and options	1	2	3	4	5	6	7		
2.	I feel understood by my coach	1	2	3	4	5	6	7		
3.	My coach appears confident in my ability to do well at swimming	1	2	3	4	5	6	7		
4.	My coach encourages me to ask questions	1	2	3	4	5	6	7		
5.	My coach listens to how I would like to do things	1	2	3	4	5	6	7		
6.	My coach tries to understand how I see things before suggesting a new way to do things	1	2	3	4	5	6	7		

Below is a list of items referring to the types of help and support your coach may give you in relation to your swimming. Please indicate to what extent you have these types of support **available to you** from your coach. It is important to note that you may not need, want or receive any of this support currently but we are asking what support you think is available from your coach should you ever need or want it.

### To what extent is your coach someone...

		Not at all	Slightly	Moderately	Considerably	Extremely
1.	who provides you with comfort and security?	1	2	3	4	5
2.	who helps with travel to training and competitions?	1	2	3	4	5
3.	who gives you tactical advice?	1	2	3	4	5
4.	who enhances your self-esteem?	1	2	3	4	5
5.	who will always be there for you?	1	2	3	4	5
6.	who instills you with the confidence to deal with pressure?	1	2	3	4	5

		<b>Not at all</b>	<b>Slightly</b>	<b>Moderately</b>	<b>Considerably</b>	<b>Extremely</b>
7.	who helps with tasks to leave you free to concentrate?	1	2	3	4	5
8.	who shows concern for you?	1	2	3	4	5
9.	who gives you advice when you're performing poorly?	1	2	3	4	5
10.	who cares for you?	1	2	3	4	5
11.	who reinforces the positives?	1	2	3	4	5
12.	who gives you constructive criticism?	1	2	3	4	5
13.	who boosts your sense of competence?	1	2	3	4	5
14.	who does things for you at competitions and matches?	1	2	3	4	5
15.	who gives you advice about performing in competitive situations?	1	2	3	4	5
16.	who helps you organise and plan your competitions/races?	1	2	3	4	5

### PART THREE

We want to know what your goals are in swimming. Please read each statement and circle the answer that is most correct for you. Remember, there are no right or wrong answers.

		<b>Not at all true</b>	<b>1</b>	<b>2</b>	<b>Somewhat true</b>	<b>3</b>	<b>4</b>	<b>Very true</b>	<b>5</b>
1.	My goal is to learn new skills and get as good as possible	1	2	3	4	5			
2.	The most important thing is to be the best athlete	1	2	3	4	5			
3.	The most important thing is to improve my skills	1	2	3	4	5			
4.	My goal is to improve so I am better than others	1	2	3	4	5			
5.	I work hard to become the best I can be	1	2	3	4	5			
6.	I want to be better than others at my sport	1	2	3	4	5			
7.	I feel successful when I learn new skills	1	2	3	4	5			
8.	To me, success means being better than others	1	2	3	4	5			
9.	I feel successful when I do my best	1	2	3	4	5			
10.	I want to show that I am better than others	1	2	3	4	5			
11.	My goal is to master the skills in my sport	1	2	3	4	5			
12.	My goal is to be better than others in my sport	1	2	3	4	5			

For each of the statements below circle the number that best indicates how you feel in relation to your swimming ability.

		Not at all good			Good			Very good
		1	2	3	4	5	6	7
1.	How good at swimming are you?	1	2	3	4	5	6	7
2.	How good would you be at learning something new in swimming?	1	2	3	4	5	6	7
		Not at all confident			Confident			Very confident
		1	2	3	4	5	6	7
3.	How confident are you in your swimming ability?	1	2	3	4	5	6	7

People have many different kinds of feelings about themselves. Below are some sentences that describe certain feelings that people have. Read each sentence carefully and think about yourself. Circle the number that shows how you feel. There are no right or wrong answers. Be as *accurate* and *honest* as you can about your feelings.

		Not like me	A little like me	Fairly much like me	Very much like me
1.	I feel pretty sure of myself.	1	2	3	4
2.	I feel proud of myself.	1	2	3	4
3.	I like being the way I am.	1	2	3	4
4.	I feel like I'm going to be a success.	1	2	3	4
5.	I think pretty highly of myself.	1	2	3	4
6.	I feel I'm as good as anyone else.	1	2	3	4

#### PART FOUR

Please complete the information below:

Age: \_\_\_\_\_ Years

Gender: Male  Female

On average, how many hours per week do you spend training for swimming? \_\_\_\_\_ Hours

How long have you been participating in swim training? \_\_\_\_\_ Years \_\_\_\_\_ Months

Is swimming your main sport? Yes  No

What is your performance level? (please tick the highest level at which you have competed)

Recreational	<input type="checkbox"/>	National Senior	<input type="checkbox"/>
Club	<input type="checkbox"/>	International Junior	<input type="checkbox"/>
County	<input type="checkbox"/>	International Senior	<input type="checkbox"/>
National Age Group/Youth	<input type="checkbox"/>		

Please indicate here which parent you were thinking about when filling this questionnaire in:

Mother/Stepmother                       Father/Stepfather

Please indicate what gender your main coach is:                      Male                       Female

**Thank you!!**



# Appendix 10

Additional Analyses: General Discussion

Variable	Total Asset Value (TAV) Coach		Total Asset Value (TAV) Parent		df	t
	M	SD	M	SD		
<b>SELF PERCEPTIONS</b>	<b>4.23</b>	<b>.43</b>	<b>4.29</b>	<b>.54</b>		
Perceived sport competence	4.35	.49	4.16	.66	428	3.38***
Self esteem	4.32	.47	4.49	.55	428	-3.40***
Clear and positive identity	4.03	.58	4.23	.68	428	-3.27***
<b>BEHAVIOURAL SKILLS</b>	<b>4.24</b>	<b>.43</b>	<b>4.21</b>	<b>.57</b>		
Organisation	4.24	.50	4.36	.59	428	-2.17*
Discipline	4.32	.52	4.17	.72	428	2.36*
Self-appraisal	4.15	.52	4.11	.64	428	.85
<b>SOCIAL SKILLS</b>	<b>3.92</b>	<b>.57</b>	<b>4.11</b>	<b>.59</b>		
Communication	4.24	.53	4.25	.63	428	-.24
Conflict resolution	3.63	.72	3.99	.70	428	-5.33***
Cooperation	3.96	.66	4.12	.65	428	-2.47*
Leadership	3.83	.78	4.05	.73	428	-3.02**
<b>APPROACH</b>	<b>4.39</b>	<b>.38</b>	<b>4.45</b>	<b>.54</b>		
<b>CHARACTERISTICS</b>						
Character	4.27	.54	4.45	.64	428	-2.98**
Positive attitude	4.36	.50	4.40	.64	428	-.62
Motivation	4.53	.42	4.42	.62	428	2.03*
Resilience	4.39	.48	4.54	.57	428	-2.85**
<b>EMOTIONAL COMPETENCE</b>	<b>3.79</b>	<b>.57</b>	<b>4.19</b>	<b>.58</b>		
Empathy	3.56	.71	4.12	.67	428	-8.26***
Emotional self-regulation	4.11	.57	4.26	.66	428	-2.43*
Connection	3.70	.69	4.19	.65	428	-7.58***

Note. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

**Table 1: Comparison of coach and parent Total Asset Value (TAV)**

Variable	Amount of Attention Coach		Amount of Attention Parent		df	t
	M	SD	M	SD		
<b>SELF PERCEPTIONS</b>	<b>3.59</b>	<b>.73</b>	<b>4.02</b>	<b>.78</b>		
Perceived sport competence	3.88	0.80	3.86	1.01	428	.25
Self esteem	3.66	0.88	4.19	.83	428	-6.42***
Clear and positive identity	3.22	0.97	4.00	.92	428	-8.47***
<b>BEHAVIOURAL SKILLS</b>	<b>3.70</b>	<b>.78</b>	<b>3.91</b>	<b>.79</b>		
Organisation	3.68	0.87	4.02	.88	428	-3.92***
Discipline	3.85	1.00	3.90	.94	428	-.57
Self-appraisal	3.58	0.97	3.81	.91	428	-2.48*
<b>SOCIAL SKILLS</b>	<b>3.37</b>	<b>.81</b>	<b>3.76</b>	<b>.85</b>		
Communication	3.68	0.96	3.90	.98	428	-2.35*
Conflict resolution	2.92	1.03	3.69	1.02	428	-7.75***
Cooperation	3.48	0.97	3.75	.93	428	-2.99**
Leadership	3.41	1.10	3.71	1.01	428	-2.88**
<b>APPROACH</b>	<b>3.98</b>	<b>.67</b>	<b>4.13</b>	<b>.75</b>		
<b>CHARACTERISTICS</b>						
Character	3.79	0.93	4.16	.91	428	-4.13***
Positive attitude	4.05	0.85	4.08	.89	428	-.40
Motivation	4.20	0.81	4.11	.86	428	1.16
Resilience	3.86	0.88	4.17	.88	428	-3.60***
<b>EMOTIONAL COMPETENCE</b>	<b>3.18</b>	<b>.87</b>	<b>3.88</b>	<b>.81</b>		
Empathy	3.03	1.00	3.91	.92	428	-9.43***
Emotional self-regulation	3.37	0.97	3.84	.89	428	-5.26***
Connection	3.13	1.03	3.88	.95	428	-7.79***

Note. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

**Table 2: Comparison of coach and parent attentional focus**



Variable	Parent		Athlete		df	t
	M	SD	M	SD		
Involvement	5.92	.84	5.46	1.03	493	5.45***
Autonomy	5.31	.96	5.52	1.11	493	-2.26*
Warmth	6.26	.76	5.77	1.06	493	6.86***

Note. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

**Table 3. Comparison of Parent and Athlete Parenting Style**

Variable	Parent		Athlete		df	t
	M	SD	M	SD		
Emotional	4.73	.35	4.58	.53	493	3.79***
Esteem	4.30	.53	3.92	.79	493	6.37***
Informational	3.19	.94	3.33	1.07	493	-1.58
Tangible	3.44	1.05	3.89	.83		-.32

Note. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

**Table 4. Comparison of Parent and Athlete Social Support**

Variable	Coach		Parent		df	t
	M	SD	M	SD		
Emotional	3.53	.94	4.73	.35	245	17.40***
Esteem	4.07	.76	4.30	.53	245	-2.74**
Informational	4.41	.72	3.19	.94	245	12.97***
Tangible	3.27	.91	3.44	1.05	245	8.38***

Note. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

**Table 5. Comparison of Athlete perceptions of Coach and Parent Autonomy-Supportive Style and Perceived Available Support**