PSYCHOSOCIAL FACTORS ASSOCIATED WITH TALENT DEVELOPMENT

IN UK FEMALE YOUTH FOOTBALL PLAYERS

By

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Doctoral Thesis

Submitted in partial fulfilment of the requirements for the award of

Doctor of Philosophy of Loughborough University

March 2016

Dedication

To my family: This is for all of you. I love you all.

To Mum and Dad: You encouraged me to take the path less travelled and it has led me here – thank you. I can't wait to see where it takes me next.

To Paul and Ian: "Being his brother I could feel I live in his shadows, but I never have and I do not now. I live in his glow" – Michael Morpurgo

Amy: You chose to take this journey with me and held my hand every step of the way. Your confidence in me and constant encouragement helped me continue when there was no light at the end of the tunnel. Numerous times, in making me stop, you've helped me carry on. I hope this makes you proud.

Harry: Have fun, work hard, try new things, take risks, make mistakes, learn the lessons and enjoy the ride!
Daddy's home, little man!

Acknowledgements

As a general rule, we're advised to avoid making our acknowledgements sound like an oscar acceptance speech, but this is my thesis and I have a lot of people to acknowledge! The past seven years has been an incredibly challenging but wonderfully brilliant journey that has taken me from being an aspiring researcher with little direction, to being a husband and father; a senior academic with a burgeoning research portfolio; and having had some amazing experiences working with some outstanding and inspirational female athletes. In many ways, this Ph.D. has played a significant role in each of those major life events, consequently each of you have too.

First, to my family: I thank you all for your unfaltering support throughout what have been some of the most challenging years of my life. You have coped with the long hours, work-life imbalance, ratty moods, pride, joy, (over) confidence, self-doubt and every other cognition, emotion and behaviour that I've experienced and displayed through completing this thesis, and have helped me to do the same.

Amy, you especially have been the one who has been there day in, day out, night in, night out, for the seven years it has taken to complete this programme of research. For everything from the 4am cups of tea during peak times; to the hours spent listening to me talk about women's football; to coping with me travelling half way around the World; to helping me through the broken bones, the slipped discs, and the pneumonia; and everything else in between: Thank you. Most importantly, thank you for the two greatest experiences of my life that changed my perspective on everything: becoming a husband and a father.

Harry, my son: Every smile, every giggle, every cuddle, every running gleefully on the spot whilst laughing incessantly – they have all provided clarity that has helped me look at life through a new lens. You are too young to understand what I'm saying right now – so we'll just say you'll be seeing more of Daddy at milk time, banana time, and 'yotyot' time ☺

Moving away from family, I would like to take this opportunity to thank my former employers, York College, and my current employers, Leeds Beckett University, for providing the funding for this Ph.D. through your respective staff development funds.

Dr. Ian Taylor and Dr. Juliette Stebbings, thank you for the time spent discussing various statistical methods with me during the latter stages of this programme of research. Helping clarify my thoughts regarding some of the more complex statistical elements was a fantastic learning and development opportunity for me. Dr Nick Holt, thank you for your

critical perspective on the grounded theory. Dr. David Fletcher, thank you for the challenging debate at every annual review.

Dale: We've travelled up and down the road spending hours on the team bus bouncing ideas, critiquing each other's thoughts and generally planning World dominance; not to mention the excessive number of trips to the Perky! Having the opportunity to spend so much time teaching with, consulting with, and researching with, somebody who is as passionate about female football and research as I am is a pleasure. You're a true friend and I look forward to more posh coffee, tarts and titbits butties, curry clubs and to taking our female football research forward in years to come. Cheers pal.

Last, but by no means least, Dr. Chris Harwood. Chris. Where do we start? You have been everything a postgrad student could want in a supervisor: A mentor, a confidant, a proof-reader, a co-author, patient, a job referee and…well…a pain the ass when I needed a kick up mine! Not bad for bloke who didn't put his hand in his pocket once for a coffee or muffin on that first meeting at Meadowhall!

Joking aside, the impact that you have had on my academic, professional and social development is immeasurable. You haven't been scared to let me make my own mistakes and have had the patience to let me muddle through them, whilst all the while steering me in the right direction towards a targeted completion. Your open, honest and frank appraisals have always been well-received, blunt honesty used in a productive manner is a refreshing quality in the world of academia - don't apologise! You've taught me valuable lessons about the publication 'game' and supported me well through the transition from a further education teacher to a senior academic staff member within a University setting. I've taken many, many lessons that I have learned from you into supervising my own postgrad students and I hope to be able to benefit them to the same degree that you have me. Every debate, discussion, argument, ding-dong and chat over a coffee has been great – difficult (and lengthy!!!) at times – but I wouldn't change any of them, because each one taught me something. Beyond all of the occasions that I've made you…well, quite frankly, scared with my next grand plan or additional job role undertaken, my only hope is that you haven't felt let down and have gained some benefit from having me as a supervisee. I very much look forward to continuing working with you in the future. And on that note, Gledhill and Harwood (2011; 2014; 2015; under review) will sign off, for now, with a simple: Thank you.

List of Academic and Professional Disseminations Arising From This Thesis

Peer-reviewed journal articles

Gledhill, A., & Harwood, C. (2014). Developmental Experiences of Elite Female Youth Football Players. *International Journal of Sport and Exercise Psychology*, *12*, 150 – 164

Gledhill, A., & Harwood, C. (2015). A holistic perspective on career development in UK female soccer players: A negative case analysis. *Psychology of Sport and Exercise*, *21*, 65 – 77.

Gledhill, A., & Harwood, C., & Forsdyke, D. (under review). Psychosocial factors associated with player development in soccer: A systematic review. *International Review of Sport and Exercise Psychology*

Conference proceedings

Gledhill, A., & Harwood, C. (2011, July). *Psychosocial Factors Associated with Talent Development in Soccer: A Systematic Review.* Symposium Presentation to the 13th FEPSAC European Congress of Sport Psychology, Madeira.

Gledhill, A., & Harwood, C. (2013, July). *Developmental Experiences of Elite Female Youth Football Players.* Symposium presentation to the 13th ISSP World Congress of Sport Psychology, Beijing

Gledhill, A., & Harwood, C. (2014, September). *Intentions vs. Perceptions: Coach-player Interactions in Female Youth Soccer.* Presentation to the 4th International Conference of Qualitative Research in Sport and Exercise, Loughborough

Gledhill, A., & Harwood, C (2014, October). *A Negative Case Analysis of Talent Development in UK Female Soccer.* Presentation to the 29th Annual AASP Conference, Las Vegas

Abstract

Psychosocial factors are the interrelated psychological, social and/or behavioural considerations that can influence talent development in football (Holt & Dunn, 2004). Despite this, the significant growth of female football worldwide, and the psychosocial challenges faced by female athletes during adolescence, scant scholarly attention has been afforded to the role of psychosocial factors in the development of talented female football players. Therefore the main aim of this thesis was to understand psychosocial factors associated with talent development in UK female football players.

Study one systematically reviewed the literature on psychosocial factors associated with talent development in soccer. Following an extensive literature searching, selecting and appraisal process, three overarching themes of psychological, social and behavioural factors associated with talent development in soccer - underpinned by a total of 33 subthemes – were created. The appraised literature has a moderate-to-high risk of reporting bias; had a significant bias towards adolescent, Caucasian, male, able-bodied, and European soccer players; and extant literature has demonstrated bias towards quantitative approaches and retrospective data collection methods.

Consequently, study two began to address these reported biases by longitudinally and prospectively investigating the developmental experiences of English elite female youth soccer players. Through interviews, fieldwork and the use of composite sequence analysis, study two forwarded the importance of psychosocial considerations including the interaction between players and key social agents (soccer fathers, soccer brothers, soccer peers and non-soccer peers), elements of self-regulation and volitional behaviours, and the subsequent developmental benefits for their soccer careers. However, this study did not address the experiences of those who were unsuccessful in their attempts to achieve an elite female soccer career, nor did it collect primary data from other key social agents.

Building on the critique of study two, study three sought to adopt an underutilised approach of negative case analysis by examining the experiences of players who had been unsuccessful in their attempts to forge a career in female soccer. Based on interviews former female players, their best friends, coaches and teachers, a grounded theory of talent and career development in UK female youth soccer players was produced. The theory posited that interactions with multiple social agents can affect the quality of talent development and learning environment that a player experiences, which can lead to adaptive player level benefits and changes (e.g., basic psychological need satisfaction; development of pertinent intra-individual constructs; optimal match preparation and training behaviours) and create a

greater chance of career success. Study three also forwarded important culturally significant considerations for practitioners working with UK female soccer players, such as an understanding of dual career demands and the impact of role strain on female players. However, study three did not test any of the theoretical predictions offered by the grounded theory.

Owing to the need to test predictions of grounded theories to assess their predictive validity, study four sought to test key predictions using a representative sample of English talented and elite adolescent female soccer players (N=137). As a result of the limited structural stability of the Basic Needs Satisfaction in Sport Scale and the Talent Development Environment Questionnaire (as demonstrated by significant cross loading of items, high bivariate correlations between subscales, and one example of an inadequate Cronbach's alpha), data was parcelled and the revised path hypothesis: perceptions of talent development environment > basic psychological needs satisfaction > career aspirations and beliefs > career intentions was produced. Path analysis supported the hypothesis. Supporting findings of studies two and three, regression analysis demonstrated that playing level positively predicted career beliefs, aspirations and intentions; whereas age negatively predicted these variables. Finally, TDEQ results indicated a perception that UK female soccer players that they can be written off before having the opportunity to fulfil their potential.

Overall, this thesis has provided original and unique contributions to the sport psychology literature by enlightening the body of research to the developmental experiences of English female youth soccer players. It provides a developmental understanding scarcely evident in existing talent development literature. The interactional roles of multiple social agents have been elucidated and linked to psychosocial development, behavioural outcomes and talent and career progression within talented female players. The thesis has extended previous approaches to talent development in soccer by testing the predictions of the grounded theory. Initial evidence suggests that the proffered grounded theory is robust; however further research utilising structurally sound and ecologically valid measures would serve to further validate these claims.

Key words: Female soccer, talent development, career transitions, composite sequence analysis, grounded theory, structural equation modelling

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Chapter 1: Introduction

Women's soccer has experienced significant growth worldwide in recent years. The number of females playing football worldwide has grown to 29 million since the first Fédération Internationale de Football Association Women's World Cup (FIFAWWC) in China, 1991 (FIFA, 2014). In addition, the Union of European Football Associations (UEFA) recently reported that the number of players across Europe has increased five-fold since 1985 (UEFA, 2014). Finally, Sport England (2012) recently noted that women's soccer is the largest participation sport for females in the UK. Despite this growth worldwide, the participation of FIFA member nations in qualifying competitions for the FIFA U-17 WWC remains low in many regions throughout the world (FIFA, 2014).

On a global level, the growth of women's soccer worldwide is underscored by the success of the recent FIFAWWC (Canada, 2015). Audience attendance figures for this tournament were higher than any other FIFA tournament with the exception of the men's equivalent and viewing figures in countries such as the United States of America and Japan were at record levels (FIFA, 2015a). For example, the FIFAWWC final match in 2015 was the most watched soccer match in USA viewing history, with a higher viewing audience than all of the men's NBA finals matches in the same year (FIFA, 2015b). Collectively, these points demonstrate the significant growth in popularity of women's football worldwide which is – in part – as a result of the specific women's football development strategies that have been produced by international football federations.

FIFA (2014) recently released its women's soccer development programme guidelines (2015 – 2018). This document includes ten key principles for the development of women's soccer; including sustainable and professionalised competitions for female soccer, the growth and development of appropriate organisational structures with a necessary focus, and having an expert knowledge base involved within decision making. Within their women's football development programme, FIFA's (2014) third initiative is a youth football development programme that has the objective "to improve youth football development, achieve a higher rate of participation, and increase the quality of teams participating in the FIFA U-17 Women's World Cup" (p.14). Moreover, FIFA highlighted that there is a need for more "well-prepared professionals working at women's football clubs and with national teams" (p.16).

Arguably, in order to achieve these objectives, there is a need for a strong evidence-base for practitioners to draw upon. This is for two key reasons: (1) There is a widely held notion that the type of sport played may influence the developmental trajectory of an athlete (e.g., Côté, Baker & Abernathy, 2007), suggesting that findings from one sport may not be

directly applicable to another; and (2) distinguished scholars have forwarded that practitioners require a contextually and culturally specific (Greenfield & Keller, 2004) evidence-base to inform their practice in order to best meet the needs of their clients, with particular attention needed within marginalised research populations (Stambulova, Alfermann, Statler & Côté, 2009; Stambulova & Ryba, 2014). This is of note in women's soccer as the general trend in sport psychology research is that females are disproportionately under-represented against their male counterparts (Conroy, Kaye & Schantz, 2008).

Arguably the most catalytic recent study centred on psychosocial factors associated with talent development in soccer (Holt & Dunn, 2004) is focussed solely on male soccer players and is approached from a cross-cultural (e.g., Berry & Triandis, 2004) context. Equally, a subsequent follow-up to this work (Holt & Mitchell, 2006) has also focussed solely on male soccer players, although may provide a more culturally sensitive level of evidence given the homogenous nature of their UK-based sample. Therefore, whilst the importance of psychosocial factors in soccer is clearly appreciated within the scientific community, a specific understanding of female youth soccer players is lacking.

Combining these points with the qualitatively different adolescent developmental experiences of male and female athletes (Gill, 2001; Holt & Morley, 2004) and the historically reported differences between the nature of male and female sporting careers (e.g., Stambulova, 1994), furthering the female soccer-specific evidence-base is a central consideration for the continued growth and development of female soccer. Whilst there has been growth in research in aspects of women's soccer such as physical demands and characteristics (e.g. Gabbett & Mulvey, 2008; Vescovi, Rupf, Brown & Marques, 2011), the consideration afforded to psychosocial factors associated with talent and career development in talented and elite women's football remains behind other aspects of sport science.

Consistent with FIFA's requirement for individual member to nations to have their own soccer development strategies, the English Football Association (FA, 2012) launched their 'Game Changer' strategy for developing women's soccer (2013-2018). Within this strategy, they cite the effective transition of youth players to adult players as an important part of the strategy. Part of the reasoning behind the revised Game Changer strategy was that the existing hierarchical three-stage Elite Talent Pathway (ETP) in England was limited by a lack of stability in grass roots football, by players appearing unprepared for the progression between levels (e.g. grass roots to Centres of Excellence; Centre of Excellence to International Youth), and there was a lack of qualified staff (Cossington, 2015). As part of the Game Changer strategy, a revised ETP for female football was devised.

The revised ETP in England is a pyramid structure approach that is designed to help young female football players develop within appropriate TDEs. Martindale, Collins and Daubney (2005) proffered that TDEs have four key characteristics: (1) long-term aims and methods, (2) wide-ranging coherent support and messages, (3) emphasis on appropriate development rather than early selection, and (4) individualised and ongoing development. Within this pyramid, there are five hierarchical stages: (1) grassroots soccer; (2) County Football Association Player Development Centres (PDCs); (3) Football Association licensed Girl's Centres of Excellence (CoEs); (4) Elite Performance Camps; and (5) International youth age groups for players to progress through. In this talent pathway, the CoEs are viewed as a critical point of transition as they aim to allow players opportunities to access appropriate levels of coaching and support throughout the ETP, enabling the programmes to develop players to a point where they can cope with the demands of Elite Performance Camps (EPCs) and ultimately age group and senior international football; enhancing a player's chances of reaching the ultimate goal of becoming an elite English female player to compete on the world stage (FA, 2012). A second function of the CoEs is to prepare players for an appropriate exit route after the U17 age group (the oldest age group within CoEs), with the typical desired route for CoE 'graduates' being one of the Football Association Women's Super League (FAWSL) teams (the highest level of Women's football min England). Formed in 2011, the FAWSL provides female football players in England with the opportunity for professional playing careers and has experienced growth in nationwide exposure through television agreements, fiscal growth through increased sponsorship and crowd attendances, and performance levels due to the professional nature of training structures. Collectively, these considerations are broadly congruent with Sport England's (2014) objectives for UK talent programmes which include producing higher quality athletes from UK talent pathways, increasing opportunities for access to UK talent pathways for athletes that demonstrate potential, and the effective integration of UK talent pathways with community, education and performance sport sectors.

The CoE to international youth transition is a critical normative transition for elite female soccer players as this will often be the start of their progress towards a professional career in UK female soccer. Notably, athletes highlight that this junior to senior career transition is the most difficult challenge during their sporting career (Alfermann & Stambulova, 2007). This presents a quandary for practitioners and athletes alike as this is also the most critical transition point during the overall soccer career (Stambulova et al., 2009). In recognising this, this thesis ascribes to the notion that talent development occurs within a

career development context and that in order to fully understand the needs of female soccer players during their careers there is a need to adopt a holistic, lifespan perspective to research (cf. Stambulova et al. 2009; Wylleman & Lavallee, 2004). By understanding the experiences of talented and elite UK female soccer players throughout their career transitions, this research will create a better informed research and applied position upon which key social agents (e.g., coaches, parents, teachers, sport psychologists, technical directors) can base their professional practice. Ultimately, this will support FIFA, UEFA and the FA in their objective of increasing the chances that talented female soccer players will be able to experience a more fulsome and productive talent pathway that enhances a player's chance of successfully making the normative transition from talented youth to elite senior soccer player.

Drawing on the above, the aim of this thesis is to understand the psychosocial factors associated with talent development in UK female soccer players. Within this, 'psychosocial factors' are operationalised as psychological or social factors, at either the individual, situational, or environmental level, that positively or negatively influence talent development in talented and elite UK female soccer players. This aim of achieving a greater psychosocial understanding of the female soccer players and talent development contexts will be achieved by a programme of research comprising four progressive investigations. Chapter two of this thesis presents an over view of the philosophical and methodological considerations associated with this thesis. Chapter three presents a revised and updated version of study one from the Ph.D., a systematic review of psychosocial factors associated with player development in soccer. This provides a critical, systematic consideration of research trends, as well as highlighting salient future research and applied implications. Chapter four presents study two of the Ph.D. which provides a longitudinal qualitative investigation of the developmental experiences of elite UK female soccer players. Chapter five presents study three of the Ph.D. which provides a grounded theory of holistic career development in UK female soccer players from a negative case perspective. Chapter six of the thesis presents study four from the Ph.D. a quantitative study which uses structural equation modelling to test some of the key predictions proffered through study three to assess factors affecting career beliefs, aspirations and intentions in talented UK female soccer players. Chapter seven closes the thesis with a general discussion of the programme of research as a collective whole, providing key reflections on contributions and future research directions.

Chapter 2: Methodology

The previous chapter introduced the background to women's and girl's football in the UK and formulated a rationale for the collection of studies which comprise this thesis. Following on from chapter one, this chapter now seeks to provide an overview of the paradigmatic and philosophical perspectives within this thesis. Specifically, this chapter will address the ontological, epistemological and axiological assumptions associated with the dominant perspectives in this thesis, postpositivism and interpretivism, before considering the role of a pragmatic perspective more broadly. An overview of these can be found in table 2.1. On a methodological level, the chapter will then close with a balanced critique of the mixed-method approach.

A research paradigm is a cluster of beliefs that, in the context of research, dictates what should be studied, how research should be done, and how results should be interpreted (Smith, 2010). Whilst an enlightening definition which provides a level of understanding, the use of the word 'should' positions the notion of a paradigm in an overly mechanistic and deterministic light. A more nuanced consideration of paradigms is offered by Morgan (2007) who contends that paradigms are shared beliefs within a research community, which share a consensus about which questions are most meaningful and which methods are most appropriate. Further, the worldview perspective of paradigms contends that paradigms shape our beliefs of our place in the world, the nature of the world and the range of potential relationships to that world and its parts (Guba & Lincoln, 1994). Collectively, these points denote that paradigms are concerned with what is known, how it is known, and the relationships between what is researched and the researcher. Often, the paradigmatic approach to research is predicated on philosophical assumptions and understanding these is key to understanding the overall perspective taken within a project or programme of research (Huff, 2009). Consequently, for many authors (e.g. Cresswell, 2013; Denzin & Lincoln, 2005; Sparke & Smith, 2014) leads to considerations of ontology, epistemology, axiology and methodology.

Table 2.1.

Research paradigms and their associated ontology, epistemology and methodology

Paradigm	Ontology	Epistemology	Methodology
Positivist	There is an objective/single reality	Suggests that behaviour/ events and its'/their meaning happen/ happens regardless of how other people act or react	Quantitative
Post-positivist	There is an objective/single reality, but our understanding of that objective reality is imperfect and often based on probability. Our understanding of this reality must be critically examined to demonstrate that we have the best possible understanding of this single reality.	Reality can only be approximated and is constructed through research. A researcher's interaction with research participants is kept to a minimum and validity of understanding comes from peers rather than research participants.	Quantitative/ qualitative/ mixed
Interpretivist/constructivist	There are multiple realities (often co-existing) that are created through our lived experiences, interactions with others and are mind-dependent.	Suggests that we cannot separate ourselves from what we are investigating. As such, understanding of reality is co-created by the researcher and participants and is shaped by individual experiences.	Qualitative

Adapted from Bryman (2008), Cresswell (2013), Grix (2002), Lincoln et al. (2011), and Sparkes and Smith (2014)

Ontological considerations relate to the nature of reality and its characteristics (Cresswell, 2013). Quantitative researchers ascribe to the realist perspective that a single, uniform reality exists independent of the individual (Sparkes & Smith, 2014). Often, this type of research will summarise research findings in a generalizable, potentially context-free and potentially cause-effect manner (Guba & Lincoln, 1994). In qualitative research, those who adopt a post-positivist perspective do not ascribe to the notion of strict cause-effect, more that there is a single reality based on a probability that cause and effect may or may not happen (Cresswell, 2013). Where positivist and post-positivist perspectives have been adopted throughout this thesis (see study one and study four), the aim has been to control as best as possible underlying considerations with research and adopt an objectivist perspective in order to predict potential outcomes as best as possible (Smith et al., 2012). Conversely, the intepretivist perspective (see studies two and three) forwards the ontological assumptions that there are multiple realities constructed through lived experiences and interactions with others (Cresswell, 2013; Sparkes & Smith, 2014). These multiple realities are constructed by the meanings that we attach to experiences and interactions (Cresswell, 2013; Guba & Lincol, 1994; Smith, 1989).

Epistemological considerations centre on what is known and the nature of the relationship between the researcher and the researched (Sparkes & Smith, 2014). Where quantitative research assumes that the researcher and researched are separate entities, qualitative research considers the research-researched relationship as an important element of the knowledge construction (Cresswell, 2013; Guba & Lincoln, 1994; Smith, 1989). From a post-positivist perspective, epistemological beliefs supports that reality can only be approximated, that there is minimal interaction between researcher and researched, and that there may be a role for statistics in constructing knowledge (Cresswell, 2013). Conversely, interpretivism contends that knowledge is co-constructed between the researcher and

researched, with knowledge shaped by individual experiences (Cresswell, 2013; Smith 1989). Studies two and three ascribed to the perspective that, on a foundational level, social realities of the players were multiple, subjective and shaped by the meanings that they gave to their experiences (Smith 1989; Smith et al., 2012).

Axiological considerations are concerned with the role of values within research (Cresswell, 2013). From the perspective of a post-positivist, the axiological stance is that researcher biases need to be controlled wherever possible whereas the interpretivist axiological perspective honours that individual researcher values may enhance and develop our understanding of topics, so should be negotiated and reconciled within the research process (Lincoln, Lytham & Guba, 2011).

Whilst the relevant ontological and epistemological assumptions have been outlined and linked to different chapters, the thesis as a whole adopts a pragmatic paradigmatic perspective. One critique of this paradigmatic approach is that little attention is paid to ontology and epistemology (Lincoln, 2010). In outlining these different assumptions, this first section had aimed to demonstrate an appreciation (Eisner, 1991) of the relative merits of different philosophical perspectives. In doing so, this chapter has presented an argument that, rather than 'brushing aside' (Smith et al. 2012) arguments of ontology and epistemology, they have been placed at a foundational level of this chapter.

One argument against the use of a pragmatic approach to research is the purist perspective that an untenable position is created when different or contrasting ontological and epistemological assumptions and perspectives are included within the same study or collection of studies (Smith et al. 2012). Arguably, this concern may be founded on the overly-simplistic contention that pragmatism is 'what works' (Dewey, 2008; Morgan, 2007; Morgan, 2014). Therefore, the next section of this chapter focusses on providing a detailed philosophical overview and justification of the benefits of a pragmatic approach to this

programme of research before moving on to provide a balanced critique on the relative merits of mixed-methods research within the same programme of study. This delineation is made as, although mixed methods research and the pragmatic paradigm make logical bedfellows, a pragmatic approach to research may not necessarily adopt a mixed methods approach (Morgan, 2014).

In the context of this thesis, the use of pragmatism as a research paradigm is defined as the use of a mix of schools of thought and methods of data collection and analysis, in a continuous abductive reasoning cycle, which was guided by the desire to produce research findings that would be theoretically and practically useful (Feilzer, 2010) within the given context of UK girl's and women's football. In doing so, this thesis accepts pragmatism as a research paradigm that has a philosophy which is influenced by, but goes beyond, problem-solving and centres on the real-world benefits of the research conducted.

Pragmatism has (re)emerged as a paradigm for research within various elements of social sciences (Morgan, 2014). On one level, a researcher adopting this approach does so to utilise research methods that are the most useful within specific contexts as opposed to those associated with a specific paradigmatic approach (Smith, 2010). It is this type of description which has given birth to the 'what works' (e.g. Smith et al. 2012) perspective on pragmatic research. Whilst this viewpoint has some merit in that there are some natural affinities between research paradigms and associated methods, there is arguably no deterministic link that forces the use of particular paradigms with particular methods (Morgan, 2014). Moreover, whilst the 'what works' perspective does contribute to many arguments which state that a pragmatic approach to research may help provide a more detailed and comprehensive understanding of phenomena (e.g., Shaw, Connelly, & Zecevic, 2010), others recognise it as the most simplistic manner by which a pragmatic approach can be understood

(Morgan, 2014), whilst others have gone further to suggest that the perennial 'what works' argument has led to the limiting of the value of the pragmatic approach (e.g., Morgan, 2007).

A key benefit of the pragmatic approach to this thesis production was its assertion that philosophies of science are schools of thought and different approaches to research which may help develop our understanding of social contexts and actions in different ways (Morgan, 2014). Consequently, pragmatism emphasizes the importance of research questions, and practical consequences, actions, and understanding of real-world phenomena; as opposed to a dogmatic view (Smith, 2010) of research and associated ontological and epistemological assumptions. In essence, the pragmatic approach adopted embraces the notion that one paradigm, philosophy and collection of assumptions may have a unique importance in one set of circumstances, but may not in another (Morgan, 2014). Indeed, one of the main contributions of Deweyan pragmatism is that it advocates a move away from the unhelpful alleged hierarchies between different approaches to research (Gage, 1989) and contends that different approaches generate different outcomes, and different connections between doings, actions and consequences, so that we might view our knowledge claims or warranted assertions through the processes by which they were generated (Biesta, 2010).

Consequently, as an academic researcher, a lecturer and a practitioner within women's and girls' football, the pragmatic approach to research augmented the evolvement of research questions and selection of appropriate research strategies (Smith, 2010). It contributed to a perspective that no method or technique is intrinsically better in knowledge generation (Biesta, 2010), more that selecting and synergistically using methods and philosophies support further knowledge generation. The pragmatic approach to this thesis incorporated problem-solving, action-orientation, and an inquiry process based on a commitment to democratic values and progress, which promoted active mixing methods throughout the thesis as a collective whole and promoted the integration of research findings

(Biesta, 2010; Cresswell, 2013; Dewey, 2008; Greene, 2007; Greene & Hall, 2010; Johnson & Onwuegbuzie, 2004; Morgan, 2007; Morgan, 2014; Smith 2010).

A natural bedfellow for a pragmatic paradigm is mixed-methods research. Throughout this thesis, each study outlines the adopted methods and the different ontological and epistemological assumptions. When viewing this thesis as a collective whole, you are invited to view this as a mixed-methods approach to understanding psychosocial factors associated with talent development in UK female youth football players.

For a significant time period, researcher were embroiled in 'paradigm wars' (Gage (1989) where debate raged regarding the superiority of quantitative or qualitative methods. However, this debate has shifted more toward and acceptance in some circles that by mixing methods in a project or programme of research, questions could be addressed that would not have been had they been addressed by either qualitative or quantitative alone (Green & Caracelli, 1997). Mixed-methods research is a type of research that includes collecting, analysing and mixing qualitative and quantitative data in a study or series of studies (Cresswell & Plano Clark, 2011). Arguably, given the infancy of existing knowledge in the burgeoning research area of psychosocial factors associated with talent development in UK female youth football, one strength of the mixed-method approach to cross-validate results (Rauscher & Greenfield, 2009; see studies two to four). Whilst some argue that the focus on the practical aspects of pragmatism over the philosophical considerations limits its potential (Morgan, 2014) whereas others note that the contrasting approaches are not commensurate with each other within a single study (see Smith et al. 2012), these practical benefits are an important consideration in its selection.

Smith (2010) denotes four key benefits of mixed-methods approach to a programme of research or individual research project: (1) expansion; (2) triangulation; (3) complementarity; and (4) development. In the context of this thesis, expansion refers to the

growth of knowledge by applying different methods and research approaches to examine different phenomena within the context of UK female youth football, in order to expand the scope, breadth and depth of knowledge. Triangulation refers to the way in which different research methods were used to measure the different facets of talent development in UK female youth football and examining the degree to which the confidence in the conclusions reached. Complementarity relates to the adoption of different methods of data collection and analysis which may be mutually beneficial yet used to assess different elements of talent development in UK female youth football (e.g., the use of interviews and surveys to measure experiences and perceptions within UK female youth football). Finally, development refers to how results from one research approach can be used to inform the development of others. For example, study four utilised a sequential mixed-methods approach to the data analysis which created an understanding of female player's perceptions of their talent development environments, but also which led to conclusions being drawn about the validity and practicality of using the existing multi-sport Talent Development Environment Questionnaire in UK female youth football.

In closing, the application of a mixed-methods research strategy through this thesis was a conscious decision that was made in response to both beliefs and actions that occurred during the PhD journey. For example, a basic belief at the start of the PhD journey was that to best understand the developmental experiences of female youth football players, they should be engaged in the research process as well as accepting that my prior understanding of female football may play a role in shaping and influencing my interpretations of their interpretations of their experiences. The action in response to this belief was to engage female players, in studies two and three, in sharing their developmental experiences. Subsequently, the belief was that, after considering and reporting how these experiences may shape and develop female football players' careers through the composite sequence analysis in study two and

grounded theory in study three, there was a need to examine the research findings in a broader context to test the predictive validity of the research findings to provide greater confidence both for myself and for any potential end-users of the research findings. Consequently, this enacted different ontological and epistemological assumptions, as well as the utilisation of different data collection and analysis methods. Rather than ascribe to the notion of a paradigmatic hierarchy where either quantitative or qualitative methods are 'better', this approach has highlighted how a mixed-methods approach to both individual studies and a programme of research overall can demonstrate an inquiry-focussed, problem driven approach to conducting research which appreciated (Eisener, 1991) the relative merits of different approaches within given contexts. In doing so, this thesis has demonstrated a commitment to Dewey's (2008) experience and inquiry-based utilisation of a pragmatic approach to research (as reported and debated in Morgan, 2014) as well as echoing calls for the continuation of mixed-methods, pragmatic approaches to research within different facets of social sciences (e.g. Morgan, 2014; Smith et al. 2012). The following chapters will present each of the studies conducted as part of this PhD thesis.

Chapter 3: Psychosocial factors associated with player development in soccer: A systematic review

Dissemination arising from this chapter:

Gledhill, A., & Harwood, C. (2011, July). *Psychosocial Factors Associated with Talent Development in Soccer: A Systematic Review.* Symposium Presentation to the 13th FEPSAC European Congress of Sport Psychology, Madeira.

Gledhill, A., Harwood, C., & Forsdyke, D. (under review). Psychosocial factors associated with player development in soccer: A systematic review. *Psychology of Sport and Exercise*

Athlete development in sport has been the subject of significant scholarly debate centred on the role of practice and play in athlete development (e.g., Côté, Baker & Abernathy, 2003, 2007; Côté & Fraser-Thomas, 2007; Ericsson, Krampe & Tesch-Römer, 1993). Ericsson et al's (1993) Theory of Deliberate Practice (TDP) is an early specialization approach that has a cognitive underpinning. It argues that athletes who undertake 10,000 hours of deliberate, domain-specific practice from an early age will have an advantage over those who do not. Characterised by hard work with little to no immediate reward, deliberate practice has gained empirical support (e.g,. Baker, Côté & Abernathy, 2003), however there is little advocation of 10,000 hour rule (see Côté et al., 2007 for a review). In centering on the cognitive mechanisms, the TDP negates the influence of affective, interpersonal and social aspects of athlete development (Côté, Lidor & Hackfort, 2009).

To advance the literature, Côté and colleagues forwarded the Developmental Model of Sport Participation (DMSP; Côté, 1999; Côté et al., 2003, 2007; Côté & Fraser-Thomas, 2007; Côté, Horton, MacDonald & Wilkes, 2009). The DMSP notes that there are two types of early sport environment that can lead to elite performance: (i) early sampling/diversification or (ii) early specialization. Early diversification is characterized by involvement in a variety of sports and participation in deliberate play. By sampling different sports and engaging in deliberate play, Côté and colleagues posited that athletes experience different psychosocial settings, engage in different social interactions and modify sports to suit their needs. Although noting the importance of deliberate play, the DMSP does not indicate whether it needs to be domain specific (Haugassen & Jordet, 2012).

As an adjunct to this debate, Singer and Janelle (1999) highlighted that game-play would be an appropriate developmental activity for team sport players, due to the competitive nature of team sports. In acknowledging the debate surrounding developmental activities, contentions that athlete and talent development processes occur within a career development context (Stambulova, Alfermann, Statler & Côté, 2009) also warrant consideration.

An athletic career is a multi-year sport activity chosen by an athlete and aimed at achieving peak performance (Alfermann & Stambulova, 2007). It is a progression of stages from initiation/sampling stage, to development/specialization stage, to perfection/mastery stage, to final/maintenance stage, and ending with career discontinuation (e.g., Bloom, 1985; Wylleman & Lavallee, 2004). Whilst these stages reflect a 'typical' pattern of athletes' careers, different sports have different demands on athletes and require different athlete-level developmental qualities to achieve their full potential (Stambulova et al., 2013). Therefore, the type of sport may affect an athlete's trajectory toward elite performance (e.g., Côté et al.,

2007). Consequently, a sport-specific systematic review will have research and applied benefits for practitioners seeking to aid athlete development.

During an athletic career, the junior to senior transition is most difficult for athletes due to its proximity with other life transitions (e.g., Stambulova, 2009; Vanden Auweele, 2004; Wylleman & Lavallee, 2004). Soccer has seen an increased professionalization of players from a younger age (Roderick, 2006) and professional soccer academies are often questioned for their lack of productivity in progressing players from junior to senior teams (e.g., Richardson, Helvas & Littlewood, 2013; Williams, 2009). Owing to these considerations, scholarly attention examining psychosocial factors in soccer has increased (Pain & Harwood, 2013).

Psychosocial factors are the interrelated psychological, social and/or behavioural considerations (Martikainen, Bartley & Lahelm, 2002) that can affect player development in soccer (e.g., Holt & Dunn, 2004). Examination of psychosocial factors associated with player development in soccer is warranted as practitioners require context specific information on which they can base their sport psychology research and practice (Ryba, Stambulova, Si & Schinke, 2013). It has long been acknowledged that effective athlete development should consider the complex interaction between the whole person, the task, and the environment (e.g., Hackfort, 2006; Wylleman & Lavallee, 2004); however, soccer has tended to centre its attention primarily on player physical, technical and tactical development (Richardson et al., 2013) and has been reluctant to change (Pain & Harwood, 2004). Therefore, a soccer-specific systematic review will have research and applied benefits for practitioners seeking to optimise player development.

To this end, two recent soccer-specific research reviews have been completed (Freitas et al., 2013; Haugaasen & Jordet, 2012). These reviews have furthered our levels of multidimensional understanding of expertise, talent, and player development in soccer.

Haugaasen and Jordet (2012) examined the development of expertise in soccer players from the perspective of the DMSP. Based on 115 studies returned from Sport Discus, four key themes relating to expertise development emerged: a) career length and peak performance age; b) the amount and content of soccer specific practice; c) non-specific practice, with specific focus on the relationship between diversification, specialisation, and skill transfer; and d) dropout from soccer. Moreover, the authors proffered that, for the DMSP and arguments associated with early specialisation versus early diversification to be relevant in the soccer context, soccer specific nuances (e.g., the requirement for football-specific formal versus informal play) may need to be integrated into the model.

Although it provides valuable insight, elements of Haugaasen and Jordet's approach to conducting their review support the rationale for further systematic reviewing of psychosocial factors associated with talent development in soccer. First, the dearth of methodological detail suggests the study lacks 'auditability', making replication of the study problematic for scholars. For example, the authors cited that literature searching resulted in "a total of 115 articles for further analysis" (p.181), however it was not clear how many of these were included in the final review or the full contribution made by some studies. Further, best practice recommendations (Moher, Liberati, Tetzlaff, & Altman, 2009) suggest that the role of authors and the process of screening and reviewing articles should be clear, whereas these details were largely absent from Haugaasen and Jordet's work. Further, only one database was searched, suggesting potentially valuable data may have been excluded.

Finally, all studies reviewed were based on male soccer players. Although this was well rationalised by the authors, it suggests that questions regarding talent development in other soccer populations (e.g., female soccer players, disabled soccer players) remain unanswered.

This latter critique is noteworthy given the changing nature of soccer in countries worldwide. For example the holistic and inclusive growth of soccer can be indicated by women's football now being a major participation sport for women worldwide (e.g., Hong, 2003). There has also been a rapid growth in impairment specific soccer in England with over 38,000 players now registered across over 400 teams (Football Association, 2010). The English Football Association (FA) currently operates seven international impairment specific squads (amputee, blind, cerebral palsy, deaf and hearing impaired [male and female], learning disability, and partially sighted). Arguably, given the growth and development of soccer on a more inclusive and global scale recently, an inclusive systematic review may advance current understanding.

Freitas et al. (2013) reviewed methodological approaches to examining psychological skills training in soccer. They reported that experimental, longitudinal designs dominated the literature, as did the sampling of soccer players under 16 years old. Studies adopted both qualitative and quantitative approaches, and some studies reported how psychological skill training was used to increase playing quality. As such, studies reported by Freitas and colleagues demonstrate links to talent development. The range of searched databases and the auditable and replicable nature of the study ensured that Freitas and colleagues contributed a comprehensive understanding by enlightening the reader to the methodological approaches. In addition to their critical comments on methods, Freitas et al. suggested that further

research is required with elite soccer players to investigate the efficacy of PST interventions, whilst at the same time acknowledging the difficulty of accessing this type of research participant. Further, they suggested that a deeper appreciation of players' use and understanding of PST in soccer is required to advance the body of research.

Drawing on the above, we contend there is a need for a more fulsome and inclusive systematic review of psychosocial factors associated with player development in soccer. The purposes of this paper, therefore, are to: a) appraise existing research and highlight research trends in psychosocial factors associated with player development in soccer; b) examine the applied implications of research; in order to c) provide salient future research and applied directions. These purposes serve to address the research question: What is/are the role(s) of psychosocial factors in talent development in soccer?

Method

The methodology of this systematic review was informed by Lloyd Jones (2004) and the PRISMA (2009) guidelines. A copy of the PRISMA checklist can be found in Table 3.1 (Appendix 1).

Search strategy

Identification of relevant work involved the following process: 1) searching e-journal databases (Science Direct, Sport Discus, PsychARTICLES and Psycinfo) using the inclusion/exclusion criteria; 2) the bibliographic screening of reference sections of eligible studies; and 3) forward citation searching of eligible studies, using Google Scholar and Web of Science.

Search terms in e-journal searches were: Talent Development AND soccer OR football NOT Relative age effect NOT Physiol* NOT Anthrop* NOT Birth date. Search terms were agreed a priori and were intentionally broad to reduce the risk of relevant literature being removed at initial e-journal searching (Gough, Oilver & Thomas, 2012). This combination of search terms was used to automatically remove any studies not centred on psychosocial factors.

Inclusion and exclusion of studies

Explicit inclusion/exclusion criteria were employed, ensuring that the confines of the review were clearly defined and that the search strategy would identify all literature relevant to the review aims (Smith, 2010). The following criteria were deployed in this study: (a) papers were published in the English language to ensure consistency in critiquing articles (cf. Tod,

Hardy & Oliver 2011); (b) between January 2004 and December 2013 as literature (e.g., Haugaasen & Jordet, 2012) suggests that soccer has undergone significant change during the past ten years; (c) papers were original articles published in a peer reviewed journal; (d) full text article available (Knipschild, 1995); (e) papers must present original data on psychosocial factors associated with player development in soccer, within the confines Martikainen and colleagues' (2002) definition. For example, a social factor such as parents may be related to a psychological factor of goal commitment. This increased commitment could manifest itself behaviourally in enhanced adherence to – and quality of – deliberate play or practice, which may result in increased performance and opportunities in soccer. Collectively, this would make *parents*, goal *commitment* and *practice/play engagement* key psychosocial factors.

Studies were excluded if they were multi-sport studies that included soccer as a sport of interest, but did not differentiate between sports or report soccer-specific findings. This exclusion was because it was not possible to draw soccer specific conclusions relevant to this systematic review. Due to the proximity of this systematic review to that of Freitas et al. (2013); combined with the auditability and transparency of their review, studies examining psychological skills training in soccer players were not included in the current review to avoid simply replicating existing findings. Conference proceedings or presentations were also excluded. See table 2.2 for full-text rejections and the associated justifications.

Sifting articles and study eligibility

Sifting was carried out in three stages (see Figure 3.1); papers were reviewed first by title, then by abstract, and finally by full text (Lloyd Jones, 2004; Meade & Richardson, 1997). At each stage, articles were excluded from the review if they did not meet the inclusion criteria. Reasons for full-text rejection can be seen in table two. In order to establish rigor within this process, a peer review team was formed. This team consisted of the lead author, a senior academic from an affiliated institution (the second author) and a senior academic from an external institution (the third author). It was created to reduce the risk of bias and the impact of human error. Eligibility of inclusion of the final studies was conducted via peer debriefing, debate and consensus reaching within the peer review team.

Table 3.2.

Full-text rejections and justifications

Authors	Reason for rejection
Bengoecha & Strean (2007)	Multi-sport article where it is not possible to delineate findings by sport
Harwood (2008)	Intervention based study
Christensen (2009)	Paper focuses on talent identification rather than talent development
Hodge, Lonsdale, & Jackson (2009)	Multi-sport article where it is not possible to delineate findings by sport
Holt, Tamminen, Black, Mandigo, & Fox (2009)	Parent focused study without links to talent development
Reeves, Nicholls, & McKenna (2009)	Focus is on age-related differences rather than talent or level-related differences
Cushion, Ford, & Williams (2010)	Review article, no primary data presented
Harwood, Drew, & Knight (2010)	Focus on parents and parental stressors rather than the player
Jonker, Elferink-Gemser & Visscher, 2010)	Multi-sport article where it is not possible to delineate findings by sport
Mouratidis, Lens, & Vansteenkiste (2010)	Multi-sport article where it is not possible to delineate findings by sport
Gearity & Murray (2011)	Multi-sport article where it is not possible to delineate findings by sport
Holt, Kinchin & Clarke (2012)	Intervention based study

Data extraction and synthesis of study results

Included studies subjected to indwelling (cf. Swann et al. 2012) whereby they were read in full several times in order to become fully immersed with the presented data, and to appreciate the context and inference of findings. The extracted data included classification of research methodology (quantitative, qualitative or mixed-methods), country in which the study

was conducted, and sample characteristics (number/size, age, and gender). Studies were appraised using the Mixed-Methods Appraisal Tool (MMAT; Pluye, Gagon, Griffiths, & Johnson – Lafleur, 2009). This is a reliable tool for appraising studies that demonstrates agreement between reviewers (e.g., Pluye et al., 2009), incorporated in mixed studies reviews (i.e., systematic reviews which concomitantly appraise papers that include quantitative, qualitative and mixed-methods papers). The MMAT has four criteria for the evaluation of qualitative and quantitative studies, whereas three criteria are applied to mixed-methods studies. The output of the MMAT is a star (*) rating ranging from $0 - 4*$ which can also be reported as a percentage value ranging from 0-100% (in increments of 25%). The MMAT does not present thresholds for risk of bias in reporting, therefore the research team agreed the following a priori: 0-24% = High risk of bias; 25-49% = high to moderate risk of bias; 50-74% = moderate to low risk of bias; and 75% - 100% = low risk of bias. Bias is a systematic error or deviation from the truth in results reported or inferences drawn from quantitative, qualitative or mixed-methods research. It can have deleterious effects on research, such as the over-estimation or under-estimation of the power or applicability of findings (e.g., the magnitude or nature of a relationship between variables, the size of effect of a treatment intervention). It may result from flaws in research design or failure to disclose the nature of the relationship between researcher and researched. Criteria relating to the assessment of risk of bias in reporting can be found as an introduction to table 3.4 (appendix 4).

The data extraction and synthesis of study results was conducted during peer review team meetings. This process involved two authors (first and third) independently appraising papers then reaching a consensus over the final study appraisal through debate. Inter-rater reliability was assessed using two-way mixed, absolute agreement intraclass correlation coefficient (Shrout & Fleiss, 1979). In instances where there was disagreement, this was noted by the lead author and a final consensus was reached using the PRISMA (2009) guidance notes to stimulate discussion, and by the second author playing 'devil's advocate' by engaging in critical debate. MMAT appraisals can be found in Table 3.4.

A two-step convergent qualitative thematic analysis (CTA; Centre for Reviews and Dissemination - CRD, 2009) followed to synthesise data from the assessment of methodological quality and research findings. A CTA consists of identifying the main or recurring themes arising in a body of evidence and is typically used for detecting, grouping and summarising findings from studies (Pope, Mays, & Popay, 2007). Themes and subthemes were created using critical debate within the author team (see Table 3.3, Appendix 3).

Concurrently with the CTA, concept mapping (e.g., Novak, 1980) was used to extend the output from the CTA. Concept mapping has a rich history in scientific knowledge exchange and sharing (e.g., Coffey, Hoffman, Cañas, & Ford, 2002), but has not been extensively used within systematic reviews. We adopted concept mapping to provide a visual representation thematic relationships, including their cross-connections and how these relate to the central concept of talent development in soccer (Eppler, 2006). The combination of CTA and concept mapping allowed us to interpretively understand and visually depict how the different themes identified through the systematic review interconnected to converge on the central concept. As such, we adopted multi-epistemological analysis within the current systematic review; initially adopting a post-positivist approach to deductively identify factors associated with talent development in soccer, before adopting a constructivist approach to producing a new understanding of how these factors may reciprocally interconnect to shape talent development in soccer. We revisited the initial concept map on multiple occasions, allowing it to grow as we constructed understanding through the systematic review process (e.g., Novak & Cañas, 2007). This process included re-positioning concepts within the map for clarity and refining interconnections to clearly demonstrate and articulate relationships. The final concept map presented (Figure. 3.2) is the fourth iteration.

Results

Literature identification

The literature searches resulted in 1915 citations after duplicated results were removed. Following the screening and sifting processes, the research team deemed 32 studies eligible for inclusion. The eligible studies (N=32) contained qualitative (n=9), quantitative (n=21) and mixed-methods (n=2) research (see Table 3.3, Appendix 3).

Demographic characteristics

The participants (N= 12041) were players (n=11966; female n=1882, male n=10084) and coaches (N=75; female n=2, male n=73). The average age of female players in the reviewed studies was 14.23 (± 2.14) years. The average age of male players in the study was 15.06 (± 1.91). The average age of coaches was 37.65 (± 6.94) years[1]. Studies (N=32) consisted of adolescent male players (n=16); adolescent female players (n=5); adult male players (n=4); male age not reported players (n=7); male coaches (n=7); and female coaches (n=2). Coaches were reported as having the following qualifications: UEFA Pro Licence / A

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[1] Some studies did not report the mean age of players or coaches.

Licence (n = 10); UEFA A Licence (n = 8); UEFA B licence (n = 19); working towards UEFA A licence or UEFA B licence (n = 10); level of qualification not reported (n=28). The studies reviewed gleaned data from the following countries: Brazil (n=1); Canada (n=2); Denmark (n=3); England (n=16); France (n=2); Ghana (n=1); Greece (n=1); Mexico (n=1); Netherlands (n=3); Norway (n=2); Portugal (n=1); Spain (n=1) Sweden (n=1); Switzerland (n=1); United States (n= 4); and country not reported (n=2). Of the final 32 studies; 18.74% (n=6) reported the ethnicity of participants, whereas 3.13% (n=1) partially reported and 78.13% (n=25) did not report Ethnicity (see table 3.5[2]).

Table 3.5.

Ethnic background of research participants

Ethnic background	Number of studies reporting	Mean percentage
White/Caucasian	6	88.8
Middle – Eastern	1	4.5
Asian	3	3.6
Other	4	3.4
Hispanic/Latino	5	3.02
African-American	3	1.83
Black	1	1.5
Not reported	1	0.7

Notably, 78.13% (25/32) of studies reviewed were based on samples drawn solely from male soccer (e.g., male players, staff working within male soccer environments). A further 9.38% (3/32) of studies predominantly sampled those from male soccer environments, with the same proportion of studies drawing on a roughly even split of participants from both male and female soccer. Finally, 3.12% (1/32) studies solely investigated female players.

Convergent thematic analysis

Drawing on Martikainen et al's (2002) definition of psychosocial factors, we constructed three higher order themes of: (1) psychological factors associated with player development in soccer (containing 15 lower order themes); social factors associated with player development in soccer (containing 15 lower order themes), and behavioural factors associated with player development in soccer (containing three lower order themes). Table

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[2] Taylor and Bruner (2012) reported the "majority of participants were black- or white-English"

3.3 (see Appendix 3) shows the psychological, social and/or behavioural factor(s) evident in each study. The concept mapping approach demonstrates links between these different factors and their relative contribution to player development in soccer (see Figure 3.2).
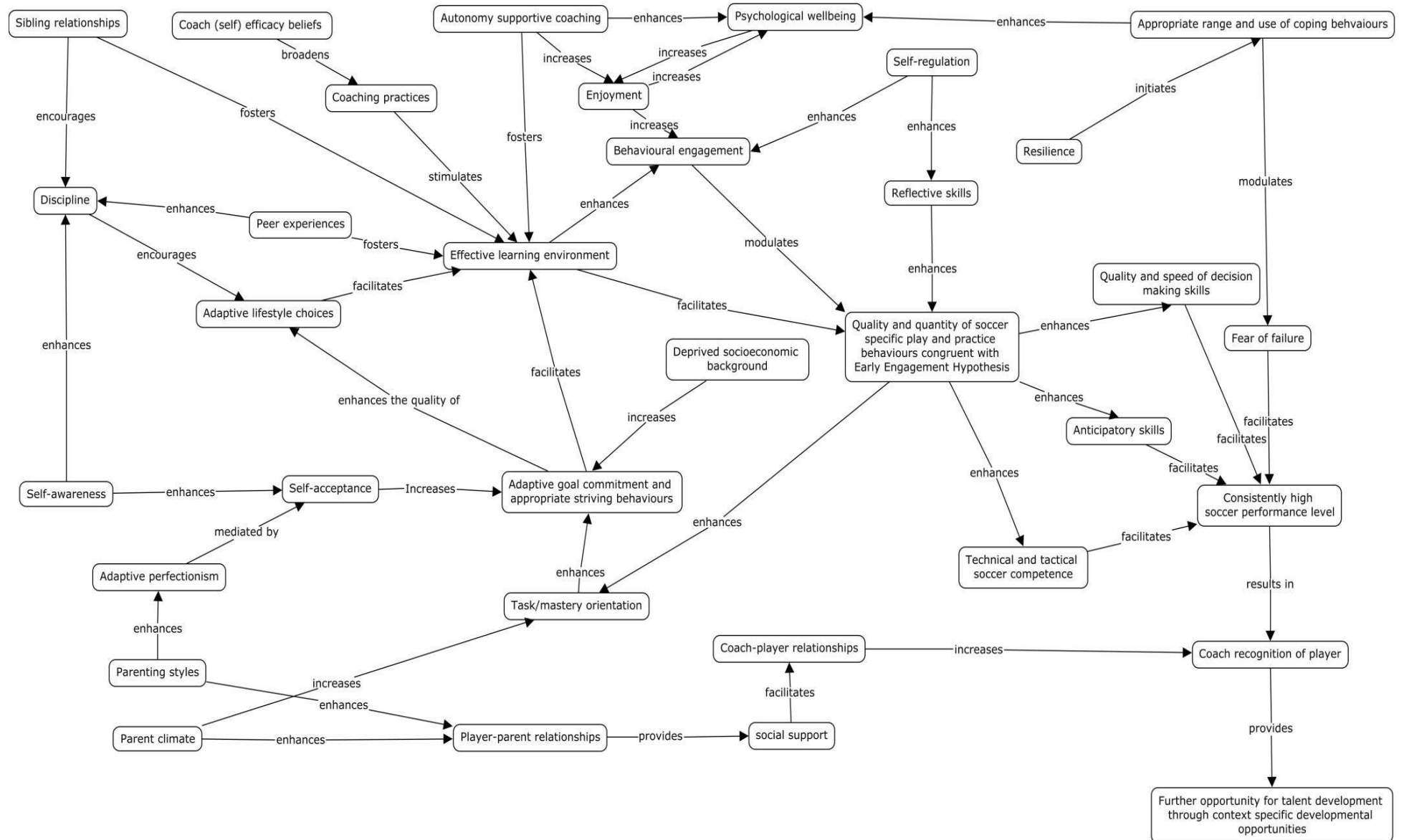
Fig. 3.2 Concept map of possible relationships between psychosocial factors and talent development in soccer

MMAT appraisal

Inter-rater reliability of study appraisals was excellent (.906; 95% CI = .825 - .949). For all eligible studies, the methodological quality ranged from 25% - 75%, with a mean of 47.66%. For qualitative studies (n=9), methodological quality ranged from 25% - 75% (M=66.67%). Quantitative studies (n=21) ranged from 25% - 75% (M=39.29%). Mixed method studies (n=2) ranged from 25% - 75% (M= 50%). Studies demonstrating psychological factors (n=13) ranged in methodological quality from 25% - 75% (M=50%). Those demonstrating social factors (n=21) ranged in methodological quality from 25% - 75% (M=47.62%). Studies demonstrating behavioural factors (n=8) ranged in methodological quality from 25% - 75% (M=50%). Owing to the number of studies returning a high risk of bias, we did not conduct a meta-analysis as doing so in such instances serves to increase this risk of bias.

Discussion

The aim of this systematic review was to understand psychosocial factors associated with talent development in soccer. Our findings suggest that psychological, social and behavioural factors reciprocally influence each other and, consequently, player development in soccer. In the following sections, we (a) narrate the concept map by elucidating the interactions between the psychological, social and behavioural factors identified through the CTA in light of previous literature; commenting on the strength of evidence and suggesting applied implications, (b) highlight key empirical limitations that may affect usability of findings, (c) provide salient future directions, (d) provide a critical appraisal of our review, and (e) close with summary take home messages.

Concept map: Thematic integration

Recall that there has been significant debate over optimal athlete development. Ericsson and colleagues forwarded the TDP which suggested that the '10,000 hour' rule would be most predictive of development of elite performance. Subsequently, Côté and colleagues contested this by positing that deliberate play and early diversification would be most beneficial for optimal development, whilst Singer and Janelle (1999) noted that match or game play would be most beneficial for development, owing to the competitive nature of sports.

Synthesizing findings from studies in our review, evidence rebuffs the 10,000 hour rule as every study of elite senior and elite youth players demonstrates fewer hours than this spent in practice (e.g., Hornig, Aust & Güllich, 2016). Moreover, findings contest the applicability of Côté and colleagues notion of early diversification, owing to the minimal

diversification reported (e.g., Ford, Ward, Williams & Hodges, 2009). Findings do however support Côté and colleagues notion of play as Roca, Williams and Ford (2012) reported that soccer play was more predictive of soccer ability than soccer practice.

Reinforcing recent research review findings (Haugaasen & Jordet, 2012) supports the notion of the Early Engagement Hypothesis (EEH; Ford et al., 2009). The EEH posits that soccer practice and play between the ages of six and 12 will contribute to talent and player development in soccer (Ford et al., 2009). Male players who attain and maintain a professional soccer career have more soccer-specific play and game-play activities in childhood than those who do not reach an elite level (e.g., Ford & Williams, 2012; Ford, Ward, Hodges, & Williams, 2009; Hornig et al., 2016). Therefore, our findings do provide support for the importance of deliberate play as well as Singer and Janelle's (1999) notion that game or match play may be most beneficial for development (Haugaasen, Toering & Jordet, 2014). These findings are consistent across the UK (e.g., Ford et al. 2009), other European countries (e.g., Zibung & Conzelmann, 2013), and multi-nation studies (e.g., Ford et al. 2012). As such, a key finding of this review is that the EEH can be deemed a culturally significant underpinning when considering the type of activities child and adolescent players should undertake, if talent development and increasing chances of progression to elite level soccer is the primary goal.

Recently, research into soccer developmental practice and play activities has been appraised as providing "no evidence" those different developmental activities "differentiate who eventually reaches top senior levels" (Haugaasen & Jordet, 2012 p.194), owing to the majority of research being conducted with male players under the age of 16. However, advancements with research incorporating senior, elite and international players highlighted greater soccer game play activities from an earlier age are linked with progression to senior elite and international level performance (e.g., Ford & Williams, 2012). Therefore, we now have introductory evidence that the type of developmental activities can not only differentiate between elite and non-elite youth players, but also those who attain a senior elite career and those who maintain and progress one.

A resultant applied recommendation for child and youth soccer coaches is to include and encourage game or match play situations as part of soccer practice and play. In making this recommendation, we are mindful of its foundation being retrospective data drawn from descriptive or correlational quantitative research that has a moderate risk of bias. However, it is plausible that this game play will result in greater career progression and maintenance due to its potential to develop optimal motoric, cognitive and perceptual, and social skills (e.g.,

Roca et al., 2012). This is a salient applied recommendation as the study of coach behaviours in soccer indicates that coaches spend more time in activities deemed less relevant to soccer match performance (e.g., physical training, skills practice) and less time on activities deemed more relevant to match performance, such as game-based activities (Ford, Yates & Williams, 2010).

The types of activities provided by coaches and undertaken by players are also important as they can influence key psychosocial variables which can discriminate between elite and non-elite players and influence career progression. Notwithstanding the aforementioned importance for motoric, cognitive and social development, game and match play activities are also cited as the most enjoyable type of activity for soccer players (Ward et al., 2007). This is pertinent as enjoyment is also negatively correlated with dropout from soccer in male and female soccer players across Europe (Quested et al., 2013). As noted, game-play is also likely to provide a source of challenge and competition for players (Singer & Janelle, 1999). This is important as appropriate levels of challenge are likely to enhance intrinsic motivation and task-orientated behaviours (Abuhamdeh & Csikzentmihalyi, 2012).

In addition to motivational benefits, coaches creating an appropriate level of challenge for their players – or allowing players to create this for each other during game play – can enhance resilience, increase athlete awareness, instigate the use of social support seeking and initiate problem-focussed coping behaviours (e.g., Collins & MacNamara, 2012). Each of these qualities is identified in the soccer literature as desired or requisite for talent development (e.g., Holt & Dunn, 2004; Holt & Mitchell, 2006; Mills et al., 2012; Morley et al., 2014; Van Yperen, 2009). Engagement in problem-focussed coping behaviours and seeking social support differentiated between Dutch players who made it to an elite level and those that did not (Van Yperen, 2009), whilst a lack of coping behaviours were reported by players on the verge of being released from English professional soccer (Holt & Mitchell, 2006). Coping behaviours are also important to modulating fear of failure, reducing its negative effect on performance (Sagar et al. 2010), with the effective seeking and provision of social support by parents as a coping resource being linked to talent development (e.g., Holt & Dunn, 2004).

Appropriate levels of challenge can also foster determination to succeed (e.g., Collins & MacNamara, 2012), which is a desired characteristic for soccer development (e.g., Holt & Mitchell, 2006). This is important as a desire to succeed will manifest itself in players seeking high quality practice and play opportunities (Toering et al., 2011) which, based on our earlier observations, would appear to be game or match-play activities (e.g., Roca et al.,

2012). However, coaches tend to use high levels of instruction, feedback and management, irrespective of skill or age groups (Ford et al., 2010). Moreover, coaches expect a conforming dedication to their instructions (Holt & Dunn, 2004) and often view players not following coach instructions and any resultant mistakes as a sign of a weak player (Toering et al., 2011). By adopting these behaviours, coaches may be – intentionally or unintentionally, knowingly or unknowingly – discouraging self-regulation and volitional behaviours. These points are noteworthy as research with male (Holt & Mitchell, 2006) noted a lack of volitional behaviours in their negative case players, and because self-regulation – particularly reflective skills and the investment of effort – can differentiate between elite and non-elite players (e.g., Toering et al., 209).

A synthesis of these findings leads us to conclude that current coaching practices in soccer may lead to reducing a player's capacity to self-regulate or at least reduce their opportunities to further their self-regulatory capacity, potentially reducing their chances of developing as a player or progressing their soccer career. Researchers should consider investigating optimal levels of self-regulation, given the potential for metacognition to lead to self-doubt (e.g., Toering et al. 2011) and the potential for self-doubt to lead to mental health issues in adolescents (Kinderman, Schwannauer, Pontin, & Tai, 2013). This understanding may support the better informed development of self-regulation education for players.

Whether accurate or inaccurate, coaches' perceptions of players' behaviours influence players' development and career progression (Toering et al., 2011). Consequently, we suggest coaches would benefit from self-regulation education. Self-regulation, by definition, is individual specific (Zimmerman, 2008). Therefore, a player not conforming to the way a coach wants them to learn may be doing so because that is not the best way for them to learn (Toering et al., 2011). However, coaches often view this non-conformity negatively (Holt & Dunn, 2004). In adopting such behaviours, coaches can be considered to be autonomy thwarting.

Autonomy thwarting coach-behaviours (e.g., not providing a clear rationale for decisions, not valuing player input, not affording player decision making; Stebbings, Taylor & Spray, 2011) have been linked to higher levels of behavioural disaffection (Curran et al., 2013), whereas autonomy supportive coaching is linked to higher levels of behavioural engagement (Curran et al., 2013), enjoyment (Quested et al., 2013) and reduced dropout (Quested et al., 2013). As engagement with soccer specific-practice and play activities enhances player ability, not adopting autonomy supportive coaching may negatively affect technical and tactical development of players. This has developmental implications as

technical and tactical ability from an early age are the player-level assets most valued by coaches (Cushion et al., 2012; Mills et al., 2012) and coaches often make selection or deselection decisions on subjective opinion (Christensen, 2009). Consequently, by not working in an autonomy supportive manner, coaches increase the chances of restricting a player's development of the assets that they –as coaches – value the most. Therefore, we conclude that by working with players in an autonomy supportive manner, coaches are likely to facilitate talent development in soccer for a myriad of psychological, social and behavioural reasons.

In sum, we contend that coaches are more likely to produce elite level soccer players if behaviourally they (a) include and encourage formal and informal soccer-specific practice and play, which incorporates game or match-play; (b) use functionally relevant challenges; (c) promote a task-orientated motivational climate; and (d) adopt autonomy supportive coaching behaviours. These behaviours increase a player's chances of progressing to an elite level due to a combination of metacognitive (e.g., enhanced self-regulation; Toering et al., 2011) emotional (e.g., modulated fear of failure; Sagar et al., 2010), social (e.g., enhanced peer relationships), behavioural (e.g., enhanced quality of practice behaviours; Ward et al., 2007), and technical and tactical reasons (e.g., Ford et al., 2010). Whilst the coach is a significant social factor in talent development in soccer; parents, siblings, and peers also play influential roles in psychological, social and behavioural adaptations which can enhance talent development (e.g., Kavassanu et al., 2011; Sapeija et al., 2011; Ullrich-French & Smith, 2009).

Consistently, parents are noted as initiating or supporting opportunities to engage and maintain soccer participation through tangible support (e.g., Holt & Dunn, 2004). Parents also have an important role to play in talent development in soccer as they may be able to support the development of valued and important player-level psychosocial assets, such as self-awareness and reflection (e.g., Mills et al., 2012; Toering et al., 2009).

Typically, fathers are seen as the more prominent parent by elite soccer players (e.g., Holt & Dunn, 2004; Kavassanu, White, Jowett, & England, 2011). This is because fathers are seen as a key source of informational support in talented soccer players, with players also valuing and attending to parental advice more-so than coaches' advice (e.g., Holt & Dunn, 2004). This last point is pertinent given the evidence that suggests that parents may be well suited to provide feedback to players, based on the motivational effect that they can have (Gershgoren et al. 2011). Moreover, literature has reported that children who perceive their fathers as being more involved with their soccer participation whilst exerting lower amounts

of pressure to perform (e.g., Ommundsen, Roberts, Lemyre & Miller, 2006) experienced more positive psychosocial outcomes.

Elite level soccer players tend to have parents who create a climate of appreciation of success through hard-work and learning (Kavassanu et al., 2011). This may aid talent development in soccer due to player-level task-orientated and self-determined motivation (e.g., Ullrich – French & Smith, 2006) associated with this parenting climate. This may, in-turn, breed a culture of unconditional self-acceptance in developing soccer players (e.g., Hill et al. 2008) and foster healthy goal commitment.

Goal commitment is highlighted as a developmental asset that elite level coaches value in their players (Mills et al., 2012) and as a quality that differentiates between players who make it to an elite level and those who do not (Van Yperen, 2009). It is likely that goal commitment influences talent development due to the increased adherence to and quality of practice behaviours (e.g., Haugaasen & Jordet, 2012).

Authorative parenting may also have developmental benefits (Sapeija, Dunn & Holt, 2011). This is a parenting style which conveys high expectations of children, but not so high that they feel pressurised or compelled to meet them (Speirs Naumeister, 2004). Sapieja et al. (2011) reported that exposure to heightened authoritative parenting styles may play a role in developing healthy perfectionist orientations, or at least may reduce the likelihood of developing unhealthy perfectionist orientations, in youth soccer players. This has developmental benefits for players as unhealthy perfectionism is linked to burnout (e.g., Hill et al., 2008) and burnout is linked to injury and dropout (e.g., Bash & Salmela – Aro, 2013; Brenner, 2007).

The applied implications of these findings are that parents should aim to (a) have appropriately high expectations of their child-players; (b) create a parenting climate that fosters task orientation; (c) have soccer related conversations with players that encourage players to generate questions about their development; and (d) support the coach-player relationship. These will give their child-players a better chance of progressing to an elite level as players are more likely to develop higher goal commitment, higher intrinsic and task-orientated motivation (e.g., Kavssanu et al., 2011) and a higher level of healthy perfectionism (e.g., Sapeija et al., 2011). In making this recommendation, we caution that the MMAT appraisal demonstrates the level of the majority of evidence to be descriptive, correlational or cross-sectional, with a moderate to high risk of bias.

These applied implications provide a platform for scholars and practitioners to develop and evaluate parent education programmes centred on parents' roles in talent development in

soccer. This is noteworthy as the majority of player development education programmes are coach-facing and parents are often neglected in this respect (Larsen, Henriksen, Alfermann & Christensen, 2014). Using these findings in combination with Harwood and Knight's (2015) recent paper on parenting expertise would serve as a platform from which such a programme could launch.

Given the evidence from players and coaches about the importance of parents in talent development in soccer the absence of primary data from parents of talented soccer players is notable. Presently, this strand of research is limited as no studies have collected data with parents. Therefore, it is currently not possible to triangulate player-level findings with parental data from soccer. To address this limitation, future research should seek to engage parents' perspectives of their role in talent development in soccer.

Peers and siblings are also an important developmental asset for talented football players (Eliot & Weedon, 2010; Van Yperen, 2009). Peers influence players' enjoyment, motivational orientation and perfectionistic tendencies (Ommundsen, Roberts, Lemyre & Miller, 2005; Ullrich-French & Smith, 2006, 2009). Better relations with peers within soccer has been associated with higher intrinsic, self-determined and task-orientated motivation (e.g., Ommundsen et al., 2005; Ullrich-French & Smith, 2006), which are associated with soccer continuation (Ullrich-French & Smith, 2009). Higher relationship quality is also negatively correlated with maladaptive perfectionism (Ommundsen et al., 2005). In addition, findings from UK male soccer intimate that peers have a role in helping players lead a disciplined lifestyle (e.g., Holt & Mitchell, 2006); noteworthy as discipline is a frequently cited pre-requisite for talent development (e.g., Holt & Dunn, 2004; Mills et al., 2012). However, presently little is known about any differentiation between the developmental roles of peers in soccer (e.g., team mates) and those outside soccer (e.g. school friends, social friends).

Van Yperen's (2009) study highlighted that successful Dutch players had more siblings than unsuccessful players. Siblings may be a developmental asset because children with one or more siblings tend to have more developed social skills than those without siblings (e.g., Dawney, Condron, & Yucel, 2013) and social skills are directly linked to fostering effective team cohesion (e.g., Bruner, Eys, Wilson, & Côté, 2014).

As well as helping to develop social skills, peers and siblings can also be a learning resource for talented players (Eliot & Weedon, 2010). In a study unique to the English Premier League (EPL), foreign migrant players were perceived by EPL representatives to be more technically competent than their English counterparts in EPL academies, whereas

English players were deemed to be more physically capable (Elliot & Weedon, 2010). The concept of 'feet-exchange' was forwarded which suggested that the players with different competencies were able to act as a learning resource for other players, aiding talent development. However, player perceptions were not sought and it was not clear from the reported methodology whether behavioural observations by the research team were adopted.

The research discussed thus far has considered the roles of different individuals within a talent development environment (TDE; Alfermann & Stambulova, 2007). However, the responsibility of developing players is not that of a single individual, more the collective responsibility of the whole environment (Larsen, Alfermann, Henriksen & Christensen, 2013), however is drawn from the same case study of a successful TDE. A successful TDE is a team or club that manages to continually produce top level athletes on the basis of their junior athletes, as well as providing them with the resources for future transitions (Alfermann & Stambulova, 2007). Studies of TDEs (Larsen et al., 2012; Larsen et al., 2013) are grounded in Ecological Systems Theory (EST; Bronfenbrenner, 1979), and literature has centred on identifying the characteristics of a successful TDE (Larsen et al. 2013) and the developmental practices within a TDE (Larsen et al. 2012). In their study of an elite male U17 soccer club in Denmark, Larsen et al. (2013) highlighted that the successful TDE offered the opportunity to develop holistic lifestyle skills; dual career management; developing the ability to work hard; and developing a sense of personal responsibility.

Despite the cited qualities of successful TDEs being documented (Larsen et al., 2013), player level evidence suggests that TDEs do not always demonstrate these qualities (e.g., Christensen & Sørenson, 2009; Larsen et al., 2012). Literature from Denmark incorporating male players highlights dual career demands during the investment years (Wylleman & Lavallee, 2004) appear to be a threat to holistic player development, can impact on junior-to-senior career transitions, and impacts on player wellbeing (Christensen & Sørenson, 2009). Finally, Larsen et al. (2012) stated that the players are expected to develop implicit, explicit, internal and interpersonal psychosocial skills. Explicit psychosocial skills are those which are being practised and talked about; implicit skills are those which are indirectly practised and talked about; internal skills include managing performance and process outcomes and interpersonal psychosocial skills include general social skills. Whilst the cited psychosocial skills were deemed important, Larsen and colleagues' evidence suggests that they were rarely being practised within the TDE. Cumulatively these points suggest that soccer TDEs may be reluctant to change their psychosocial development practices (cf. Pain & Harwood, 2004), with a trend of 'practice-based evidence' (Christensen et al., 2011). This provides further

support for the lag between research recommendations and utilisation of these in soccer (e.g., Cushion, Ford & Williams, 2012).

Collectively, these studies have served to share practice with scholars and practitioners about the features and expectations of a successful TDE which may serve to guide future TDEs. However, literature has yet to extensively consider players' perspectives of their TDEs suggesting that future research should give voice to players so that practitioners can learn and develop using information gleaned from their key stakeholders. Further, all TDE-focussed research from Denmark is based on the same successful soccer club. Whilst a key strength of this may lay in its lack of generalisability with the depth of information gained compensating for the lack of breadth, findings and practices may not be replicable in different cultures.

Current empirical limitations

Research designs. The bias towards descriptive, correlational and cross-sectional research designs (see Tables 3.3 and 3.4) in the quantitative literature restricts our ability to establish causal relationships between psychosocial factors and player development in soccer. Moreover, retrospective methods dominate the literature (e.g., Holt & Mitchell, 2006) which presents concerns over recall bias and recall error associated with retrospective methods (e.g., Krosnick, 1999). In addition to utilizing the concept mapping as testable hypotheses, future quantitative research should seek to explore causal patterns of psychosocial factors and player development. Well-controlled longitudinal, prospective studies would serve to address these issues and may provide a more developmental understanding of player development from a lifespan perspective. Finally, variations of self-report (e.g. semi-structured interviews, participant history questionnaires) dominate the literature which introduces concerns over social desirability or self-serving bias (van de Mortel, 2008). Most research is limited by an absence of behavioural observation data to corroborate or triangulate interview findings; thus, observational research conducted in a wider range of TDE's (cf. Larsen et al. 2013) may extend existing knowledge.

Utilising the MMAT quality criteria, it is apparent that quantitative studies report their samples with clarity, but the sampling procedures less-so (see Table 3.4). There was scant evidence of any sample size or statistical power calculations being conducted, with select studies (e.g., Zibung & Conzelman, 2013) giving attention to the representative nature of the sample. This pattern gives potential for a higher risk of bias. Further, quantitative research has sporadic limitations in measurement tools, such as low or inadequate Cronbach's alpha values (e.g., Kavassanu et al. 2011).

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Applying the MMAT to qualitative research showed there was little consideration afforded to reporting the researcher's influence in data collection or the analysis process (e.g., how researchers interacted with participants; how the researcher's background may have influenced data collection or interpretation). Given the researcher as instrument consideration (e.g., Denzin & Lincoln, 2003), further consideration of the role of the researcher when reporting qualitative studies is noteworthy.

Clarity of definitions. There is also a lack of clarity over some operational terms and classification of playing or coaching levels in studies. For example, the classification of 'elite' players has ranged from international youth players (e.g., Holt & Dunn, 2004) to semi-professional players (e.g., Roca et al. 2012). Greater clarity in defining player levels is required.

In addition, whilst we have highlighted resilience as a key asset associated with talent development in soccer, there are alternative definitions reported between studies (e.g., Holt & Dunn, 2004; Van Yperen, 2009), as well as there being potential for the term having different meanings for players and coaches. Furthermore, the term 'coping behaviours' and 'social support' have been used separately (e.g., Holt & Mitchell, 2006; Van Yperen, 2009) whilst others have suggested social support seeking to be an effective coping behaviour for soccer players (e.g., Sager et al., 2010).

Research sensitivity to culture, gender and ability. The American Psychological Association (2010) notes that race and ethnicity of research participants should be reported in studies, yet 78% of studies in this review did not report ethnicity of research participants. Consistent with other areas of psychology where ethnicity was reported, the dominant ethnicity was Caucasian (e.g., Delgado-Romero, Galván, Maschino & Rowland, 2005). This may call into question the ethnic and/or cultural sensitivity and applicability of research findings. However, as we were only able to generate a racial or ethnic profile for less than 20% of studies, this note should be viewed with caution.

In addition to the dominance of Caucasian ethnicity; the literature is also densely populated with male, able-bodied, mid-adolescent, western-European players. We conclude that this has created significant biases within the literature which may undermine professional evidence-based practice by limiting the generalizability of findings. For example, it would be potentially deleterious for professional practice for one to base their work with female players on findings solely gleaned from male players, given the qualitatively different sport experiences for males and female (e.g., Gill, 2001) and the different meanings that male and female athletes ascribe to sport experiences (e.g., Holt & Morley, 2004).

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With a nod to cultural sensitivity of findings, where studies have researched female players, these have typically been of North American (e.g., Moran & Weiss, 2006) or Nordic (e.g., Ommundsen et al., 2005) origin. Whilst this may primarily reflect the more well-established nature of female sport in these countries in comparison to England, it also highlights a dearth of literature based specifically on English female soccer players. This is important given the differences in female sports cultures between these countries and England (e.g., the USA having well-established mechanisms for using high school, Collegiate and University education and sport to provide the platform for professional and international sport, whereas England has noticed decreased organised school sport; Gibson, 2012).

Future research directions

In addition to the theme-specific future research directions, we have highlighted three more general future research considerations which will broaden, deepen and enlighten our current understanding in this area.

Diversifying research populations. To advance the literature on player development in soccer, greater scholarly attention should be paid to diversifying research populations to meet the needs of changing soccer. Given the growth and popularity (e.g., Skille, 2008), strategic global development plans for female football development (e.g., FIFA, 2014), and increased professionalization of women's soccer (e.g., English Football Association Women's Super League), greater representation of female players is warranted. These findings echo those of wider sport psychology literature which denotes a significant under-representation of female athletes in comparison to their male counterparts (e.g., Conroy, Kaye & Schantz, 2008). Equally, given the growth and development of impairment specific soccer (FA, 2010), greater consideration of players within the various forms of impairment specific soccer is warranted.

A further point of note is a scarcity of studies reporting the socio-economic status of participants (or families) included in the study. Given that there are suggestions (e.g., Elliot & Weedon, 2010) that a players' socio-economic background can affect their developmental behaviours, we advise researchers to collect socioeconomic background data as part of their demographic information in future research, where appropriate.

Testing grounded theories. The existing literature provides two grounded theories which theorize how talented soccer players will increase their chances of progressing or transitioning to an elite level in male (e.g. Holt & Dunn, 2004; Holt & Mitchell, 2006) soccer. The predictions of these grounded theories have yet to be empirically tested, making the predictive validity of these theories unknown and they are not generalizable to female soccer

players at comparable stages of their soccer career. This is noteworthy given that many soccer players who make it to a professional soccer academy will not have a professional career (e.g., Williams, 2009) and the noted difficulties in junior to senior career transitions (e.g., Stambulova, 2009). Longitudinal, prospective studies could address this issue; as could sampling elite senior professional players who are significantly under-represented in the body of research.

Methods and methodologies. The modern digital age opens up avenues for alternative methods of qualitative inquiry. For example, evidence suggests that qualitative visual methods (e.g., Autodriven Photo-Elicitation Interviews) can be rich source of data when working with child and adolescent research participants due to their ability to attach a subjective meaning to the images they take (e.g., Clark-Ibáñez, 2004). By expanding the range of qualitative methods, researchers may enhance the breadth and depth of understanding.

Strengths and limitations of this review

This systematic review has provided original contributions to the body of research by disseminating study and thematic level quality appraisals of current papers. It also provides a concept map of ideas that may form testable hypotheses for future research to investigate. A final strength is the combined use of independent reviewing, analysis of inter-rater reliability, and consensus reaching amongst the research team.

A limitation of this review is the potential impact of excluding multi-sport studies that did not make soccer specific conclusions. By doing so, we may have negated to include potentially valuable information. However, as effective professional practice needs to consider the sport specific sociocultural context (e.g., Ryba et al., 2013), we deemed excluding these studies necessary to ensure that we considered only soccer specific findings. Secondly, by only including studies that were published in English language, we have potentially excluded relevant high quality literature. We accepted this limitation to ensure consistency in critiquing literature that was afforded by only selecting articles published in English language (cf. Tod et al. 2011). Finally, there has been recent debate surrounding whether quality criteria should be rigidly applied to studies, particularly when assessing qualitative studies (e.g., Glasziou, Vandenbroucke, & Chalmers, 2004). As such, we accept that aspects of the critiques made regarding methods and methodologies in this review are a function of the appraisal tool selected. Scholars appraising the literature using different appraisal tools may reach alternative conclusions.

Conclusions

We found that psychological, social and adaptive developmental behaviours in soccer players are reciprocally interrelated and enhance their development, thus increasing their chances of attaining a professional soccer career. However, research had a cumulative moderate risk of reporting bias. Talent development in soccer can belie a speculative and subjective process (Christensen, 2009; Christensen et al., 2011), with an apparent incongruence between coaching practices and research recommendations (Ford et al., 2010). Given the dominance of Caucasian, male, able-bodied soccer players in the literature, we echo recent sentiments (Ryba et al., 2013) calling for culturally sensitive research which gives voice to under-represented or marginalized research populations such as female soccer players.

In closing, this systematic review has highlighted a number of future directions which may guide the direction of this thesis. It has drawn attention to the disproportionate representation of quantitative literature over qualitative or mixed-methods research, an over-reliance on retrospective methods, and noting a significant gender bias towards adolescent male players. The scarcity of literature examining the psychosocial factors associated with talent development in female soccer is a notable consideration given the growth, expansion and increased professionalization of female football in England. Therefore, the main aim of this thesis was to understand psychosocial factors associated with talent development in UK female soccer. Study two commences this journey by qualitatively examining the developmental experiences of elite female youth soccer players.

Chapter 4: Developmental Experiences of Elite Female Youth Soccer Players

Dissemination arising from this chapter:

Gledhill, A., & Harwood, C. (2013, July). *Developmental Experiences of Elite Female Youth Football Players.* Symposium presentation to the 13th ISSP World Congress of Sport Psychology, Beijing

Gledhill, A., & Harwood, C. (2014). Developmental Experiences of Elite Female Youth Football Players. *International Journal of Sport and Exercise Psychology*, *12*, *150 – 164*

The previous chapter (study one) provided a comprehensive review of psychosocial factors associated with talent development in soccer. The findings from study one reaffirm the absence of research attending to UK female soccer players developmental experiences and an over-reliance on retrospective methods; thus providing a clear mandate for the longitudinal, prospective investigation of developmental experiences of elite female youth soccer players in the UK. Redirecting research to in this way is warranted given the need for culturally and contextually sensitive research findings that can serve to support research and practice development within sport psychology and career transitions (Ryba et al., 2013; Stambulova et al., 2009).

For females, the growth of soccer participation worldwide has been dramatic over the past ten years with soccer now the number one participation sport for females in a number of countries including England, Norway and the USA (Hong, 2003). Worldwide, there are now 2.9 million registered youth female players, equating to a 32% increase since 2000. With the success of the recent UEFA Women's European Championships in 2009 and the FIFA Women's World Cup in 2011, women's soccer is now in a unique position where its' profile can be raised on an international level. This undoubtedly offers the opportunity for the development on a global scale.

The growth of female soccer has led to an increased focus on female player development within different countries. In England, for example, the Football Association's (FA) 'Women's and Girl's Soccer Strategy 2008 – 2012' focuses on the development of female soccer at all levels of participation and at different levels of involvement (e.g. players, coaches and officials). Within their strategy, the FA state that there is a need to develop better female players, increase and retain female participation, raise standards and behaviour, and increase awareness and positive perception of the women's and girls' game. Unfortunately, within talent development in general, there is a lack of widespread evidence – based practice (Bailey et al. 2009) and the translation of sport science research to practice has generally been found wanting (Bishop, 2008; Ford, Yates & Williams, 2010).

Whilst there has been sociological debate about the development of female soccer on a worldwide scale (e.g. Hong, 2003) that demonstrated an appreciation of the growth and importance of female soccer, there remains a lack of research with youth female soccer players that has that has targeted an understanding of their developmental experiences from a longitudinal perspective (e.g., study one; Van Yperen, 2009). This has particular importance for two key reasons. First, child, adolescent and adult experiences are quantitatively and qualitatively different (Wiese-Bjornstal, LaVoi & Omli, 2009). This suggests that to

understand the experience of a female youth player, researchers must examine this experience from their perspective. Further, because only a minority of talented young female soccer players can progress onto being elite level adult players, our understanding of such developmental experiences could play a vital role in helping soccer organisations to enhance the female game by learning from those who have lived that experience. Second, in sport psychology research in general, male athletes are disproportionately represented when considered alongside female players, suggesting a greater depth of investigation with female players is required (Conroy, Kaye & Schantz, 2008). Given the male-dominated structure of professional sport, the needs of females athletes are often misunderstood (Douglas & Carless, 2009). Many of the major posits of talent development in soccer research are based on findings from predominantly male populations (see study one), with conclusions being transposed into female soccer. This is particularly apparent with the major conceptual framework associated with talent development in soccer (Holt & Dunn, 2004) where the key findings are based on the experiences of male youth soccer players. This makes the generalizability of findings into female soccer difficult due to developmental differences between males and females (Gill, 2001).

Whilst the body of research into youth sport has undergone recent expansion (e.g. Holt, Black, Tamminen, Fox & Mandigo, 2008; Holt, Tamminen, Black, Mandigo & Fox, 2009), still little is known about the developmental experiences of youth soccer players from the player's perspective. Further research that is sensitive to different stages in the developmental process and with individuals from a range of talent development systems is needed (Holt & Dunn, 2004).

When considering a developmental approach to sport psychology, researchers often explore patterns of development in psychosocial factors affecting sport participation. The term 'development' is seen to refer to the nurturing and enhancement of soccer players (Holt & Dunn, 2004). A developmental approach focuses on internal affective and psychological processes which influence social relational interactions whilst also appreciating an individual's progressing maturational phases. Inevitably, throughout a player's developmental process, there will be multiple social agents (Ullrich – French & Smith, 2009) that act upon the athlete that will influence their development, both as young soccer players and as young people. Previous soccer-specific literature has examined social and motivational predictors of sport participation (e.g. Ullrich-French & Smith, 2009), the influence of coaching behaviours (e.g. Weiss, Amorose & Wilko, 2009), and parenting styles (e.g. Sapieja, Dunn & Holt, 2009); however there are few links made specifically to the talent

development of elite female soccer players (see study one). In addition, there is currently little understanding from a developmental perspective or relating to if or how their perceived influence changes throughout the course of a female soccer player's career.

Given the lack of literature that adopts a developmental approach (see study one), the aim of the current study is to gain a richer insight into the developmental experiences of elite youth female soccer players by adopting a qualitative approach that is supplemented by a composite sequence analysis. When combined, these approaches can serve to provide a rich developmental understanding of developmental experiences of female youth soccer players. This is will be achieved by addressing the following key research questions: a) What are the developmental experiences of elite youth female soccer players; b) How do these experiences change throughout their playing career; c) What are the key factors that players feel have helped them to become an elite youth player; and d) How do players feel these key factors have influenced their developmental experiences?

Method

Participants

We used purposive sampling which involved the selection of a sample of female soccer players (N=4; *M* age at time of first interview = 16.75 years, *SD* = 0.5) for whom the research questions were relevant (Patton, 2002). Given the focus of the study, the sampling criteria were that players had to play for a youth international team, international college representative team or a team in the Women's Premier League (WPL - the highest level of female soccer in the UK at the time of the first interview), thus making them a clear representative sample (cf. Barker et al. 2010). Players reported a mean playing experience of 8.13 years (*SD* = 0.48) which included attaining the following levels of performance: youth international level (n=3), international colleges representative team (n=4) and WPL (n=4). Players represented different club teams and two players transferred club teams (by entering the newly formed Women's Super League) during the study. Access was gained to players through the lead author's professional acquaintances within soccer. All players were from a divorced-remarried parental structure and lived with their biological mothers and step-fathers. All players and their families were from a white Caucasian background. Following university ethical approval, each player and their parents received a participant information letter and informed consent form that was appropriately completed prior to the study commencing.

Data collection

This study took place over a 20-month period. We adopted an interpretive qualitative

approach where players were encouraged to provide the lead researcher with 'their story' of their developmental experiences in soccer. This provided an interpretive form of understanding to gain a rich understanding of their lived experiences. Given the prospective element of the study, the interpretive approach allowed us to study these players' stories as they unfolded over time (Smith, 2010). An important reflection here is that 'data' refers to information gained from all meetings[3] with players. This data included transcriptions of audio recordings of interviews, information from a reflexive audio diary and field notes made by the lead researcher during, or shortly after, meetings (c.f. Douglas & Carless, 2009).

Interviews

In total, 10 formal interviews (three each with Beth and Lisa pre-season 1, post-season 1 and post-season 2; two each with Amanda and Michelle who were unable to attend formal interviews post-season 1) took place over the course of the study (mean duration = 52.2 minutes, SD = 9.81). Interviews were conducted by the lead researcher who has 15 years' experience coaching soccer to both male and female players as well as eight years' experience providing sport science support to youth athletes. No players in the current study had previously been coached or supported by either of the researchers conducting the study. The interviews were audio recorded and professionally transcribed, verbatim. During each interview, clarification probes (Rubin & Rubin, 2005) were used to clarify meaning and add depth to the understanding of the players' experience (cf. Douglas & Carless, 2009). During interviews, the lead researcher discriminated between those instances where the order and connections between experiences appeared clearly from the athletes' accounts and those instances where this was less clear (cf. Nieuwenhuys, Vos, Pijpstra & Bakker, 2011) as the quality and clarity of players' expressions potentially influences the sequential structuring of experiences. In instances where the order or sequence of events was unclear, probe questions were further adopted to ensure accurate sequential structuring.

The interview guide was based on findings of study one and was separated into the following areas: General background in soccer / rapport building questions (e.g., How did you get started in soccer?); family (e.g., Have your family helped you to develop as a player?); peers (e.g., Do your peers influence your development as a player?); coaches (e.g. What do you think are the qualities of a good soccer coach?), psychological skills use (e.g.,

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[3] The term 'meeting' refers to formal interviews, attending games, informal face – to – face discussions and telephone conversations.

Do you use any particular psychological skills to help develop your soccer?); perceived soccer competence (e.g., What do you think makes you a good soccer player?); and perceived personal qualities (e.g., What personal qualities do you think you possess that have helped you to become a good soccer player?). The initial retrospective interviews served to allow players to reflect on their career to date to provide their stories in an open – ended manner using their own words (cf. Douglas & Carless, 2009). Questions were centred on the different age groups that players progressed through within soccer. The interview guide was provided to players prior to the interview so that they had time to consider the focus and nature of the interview with a view to increasing the richness of data collected (cf. Christensen, 2009).

Follow-up interviews served to investigate the current aspects of the players' careers and their development during the course of the study (e.g., Are there any changes happening in your career now; How do you feel you are currently developing as a player?). The prospective aspect of the interviews pertained to the players' future career development (e.g., what do you think you will need to do to be able to progress from this point? What help / advice do you get from [significant people around you] that helps you to develop as a player? How do you feel this help / advice is contributing to your development?).

Fieldwork

Alongside interviews, the lead researcher used informal data collection methods during fieldwork to allow the players to feel more at ease leading to greater rapport development (Pitts & Miller-Day, 2007), to reduce the influences of recall bias, and to allow for the developmental tracking of players. During the 20 month period, the lead researcher had a number of open ended informal discussions with participants. These discussions included a variety of topics that were raised by the players (e.g., progression between international age groups, breakdown in coach –athlete relationships, changing playing position, team manager resigning). Furthermore, the lead researcher also attended 19 league and youth international soccer matches in which the players were participating. This yielded further informal pre- and post-match discussions surrounding a range of developmental topics; from pre-match discussions about 'how things were going', to post-match discussions surrounding feedback from coaches or feedback and comments from fathers.

Data analysis

Data was initially analysed using the two stage method of inductive content analysis (Côté, Salmela, Baria, & Russel, 1993). This method adopted a line by line analysis to provide an initial descriptive understanding of the themes that emerged from the data. Philosophically, we adopted an interpretive approach whereby the developmental experiences

of these players could be interpreted using their words, subjective meanings and representations.

A composite sequence analysis (Miles & Huberman, 1994) was adopted whereby the developmental experiences given by players were placed into a sequential framework of chronologically structured events (cf. Nieuwenhuys et al. 2011) providing a plausible *developmental* understanding of the female players' experiences.

Next, as part of a collaborative member checking process, each participant was provided with the interpretations of the lead researcher and asked to critically comment on these interpretations and the sequencing in which they occurred, thereby creating a developmental reality co-constructed with these particular players (Chase, 2005).

Results and Discussion

The aim of this paper was to explore the developmental experiences of elite female youth soccer players, and the key factors that players feel have helped them to become an elite youth player. A unique feature of this study was that we investigated elite youth female soccer players whilst they were developing which allowed us to interpret temporal changes and their perceived importance. Therefore, in order to bring these key developmental factors, processes and associated experiences to life and to locate them in the developmental timeline of a female player, we present the results of the CSA first, before more specific attention is paid to each theme individually.

Composite sequence analysis (CSA)

The CSA (see figure 4.1) of events found that between ages 6-10, the brother and father of the developing player were important for initiating play in soccer. In addition, the father was important for encouraging play in soccer and peers were important for facilitating play in soccer. Between the ages of 10 – 12, competition against male counter parts was important for developing soccer specific attributes. Ages 12 – 14 offered the female players the opportunity to enter organised female-only soccer and provided them with the opportunity to "stand out" amongst other female players. However, players also thought that they developed the least in their formal soccer development during this period. This was related to being no longer allowed to compete against male players in matches, even though they did still play against male players in unsupervised games. Between the ages of 14 – 17, involvement in organised female soccer (consistently with junior squads of WPL teams) was seen as important as this provided the opportunity to stand out against other female players, thus providing opportunity for entry to international level. During these ages, the increased commitment, discipline and sacrificing a "normal teenage life" was central to continued

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development and 'non – soccer friends' were important in assisting this process outside soccer. Between 17 – 19 years, further increased commitment was noted through sacrificing elements of what players referred to as a "normal late teens / early adult life" (such as refraining from having a boyfriend / girlfriend, and from drinking alcohol). Players also noted an increased attention to, value of, and actioning of, the technical advice provided by coaches, experienced fathers and experienced brothers. Finally, this was the age range where players began to use different psychological skills (e.g. self-talk, goal-setting, imagery) more frequently. Throughout all age ranges, the father and brother acted as role models, a source of soccer inspiration and important providers of informational support. Furthermore, emotional and tangible support from family members was viewed as central to continued involvement and development as a player. Enjoyment and perceived competence were important for initiating and continued participation, with perceived competence also being seen as a factor in improving as a soccer player. Finally, social support from peers was an important factor in maintaining participation.

The following sections will now elucidate these key developmental themes, using block quotes of the players' voice that convey the meaning of the players' experiences (cf. Barker et al. 2010; Douglas & Carless, 2009). Pseudonyms are attached to player comments to maintain confidentiality. Integrated are discussions in the context of prior literature, and future research and applied implications.

Soccer-fathers

A meaningful developmental influence from the earliest age of playing soccer (6 years) and throughout the playing career was each player's biological father (*soccer fathers*). Corroborating previous soccer-specific findings from elite youth male players (e.g., Holt & Dunn, 2004), the soccer-father provided tangible support in the form of transport and finances. Michelle and Lisa pointed out that their fathers "took them everywhere" to play soccer, whereas Beth pointed out that her father provided finances for kit, such as buying her new boots. All players highlighted that their fathers watched a lot of their soccer which they felt was a sign that their fathers were interested in their development and this fostered positive father – child relationships.

Figure 3.1. Composite Sequence Analysis of factors positively influencing the development of elite female youth football players.

To our knowledge, a finding unique to this study was that each soccer-father had a current or previous role within professional soccer either as a player, or a coach, or both. Most meaningful from a talent development perspective was that, as a result of their fathers' experiences in soccer, players had access to high quality informational support. Informational support provides individuals with advice or guidance about possible solutions to problems (Holt & Dunn, 2004). Each player reported this as significant in their development and told a story about how their father had helped them to develop as a player. Michelle had an interesting relationship as her father was also her soccer coach when she was younger.

"My dad coached weekends when I was growing up and he took me with him...It was quite nice being coached by my dad as I was growing up. Sometimes you'll get coaches that don't really know how to handle you, but because he was my dad as well, he knew how to handle me. He knew what I wanted from soccer; he knew how I learnt things best so all that really helped me learn as a player"

Lisa discussed how she respected her father's playing experience and how his understanding of his daughter helped to contribute to her development as a soccer player:

"…he was always taking me to the park and having a kick about with me and then I found out that he was quite a good player in his day. He was at [professional clubs] but then had to retire because of injury. He knows his stuff to be fair and he is always my worst critic but it's good cos he knows me and knows how I work, so if I've played bad and come off the pitch in a mood, he knows how to deal with me and talks to me about stuff I can do to improve."

After moving to a new club (at the highest level of women's soccer in England), Beth discussed how her father has helped to develop her and also provides an insight into how her father's behaviour has changed towards her during the more recent stages of her career:

"My dad is always honest with me about how I'm going. It's really important to me as obviously he knows a lot about soccer being a former player and now coaching, and for him to talk to me about what I need to do is only going to push me on further. As I've got older the type of advice he gives me has got more technical… Now that I'm playing at a higher level, I've learned more about the game and we can now talk much more in − depth about it and it's like me and my dad are talking about how I can improve now rather than my dad just telling me what I've done right or wrong and how I can improve. My dad always like asks me now what the coach has said to me in my reviews too…I know how hard it is going to be to get into the [senior international team], so my dad is always helping me understand what's been said and encouraging me to listen to

what my coach has said. It's good with my dad now cos I don't ever get a lie out of him now about soccer. "

This provides an important extension to previous soccer parenting literature which highlighted that more competent parents of female soccer players were able to have effective performance-related discussions with their children post competition (Holt & Black, 2007). As these players' careers progressed, they perceived their fathers to increase the quality of informational support given to match the requirements of the player and players placed great emphasis on this because of the professional experiences of their fathers. In attempt to explain player-level benefits of this, based on the fact that these soccer fathers were essentially *coach-fathers*, we examined the sports coaching (e.g. Ford et al., 2010), pedagogy (e.g. Hubball & Robertson, 2004) and parenting literature. From this, we surmised that these coach-fathers were enhancing the development of their *daughter-players* by creating an effective learning environment using techniques acquired through their playing experience and / or coach education. Due to the positive father-daughter relationships reported by players we argue that the developmental impact of fathers was greater given the motivational influence that parents exert (Gershgoren, Tenenbaum, Gershgoren & Eklund, 2011).

The informational support from the father occasionally differed from the advice that was being provided by the coach. Given the experience and knowledge of the fathers in this study, this sometimes became a source of internal conflict for the players as they were unsure of which advice to follow. Importantly, the soccer fathers encouraged the players to follow the advice provided by the coaches rather than their own as the advice of the coach would tie in with the needs of the team. For example, during a conversation after a game where Michelle had immediately gone to speak to her father about her performance, I asked Michelle how she felt about her dad speaking to her about her performance after games. She offered the following observations:

> "As I've got older and moved to [current team] my dad still talks to me about how I can improve cos he still watches all of my games when he isn't coaching. I always take my dad's advice on-board but whenever my dad says something different to my coach, he will always be like 'take your coach's advice because you play for them, you don't play for me now'. This helped me to understand a bit more about why I needed to listen to my coach and sorta made me value what they said more."

Speculatively, we assume that this parenting style is grounded in the fathers' experience within professional soccer. We maintain that this soccer experience has provided these soccer fathers with a more empathic understanding of the importance of the coach – player

relationship (Becker, 2009) and the influence that they (as soccer parents) could have on the dyadic coach – player relationship (Jowett & Timson-Katchis, 2005). However this assumption can merely be accepted as informed speculation in the absence of data from these soccer fathers. In addition, given the positive tone conveyed by players exposed to this paternal soccer background and experience, we cannot assume that such facilitative father-daughter dyads will exist where fathers lack such specificity of soccer knowledge and experience.

Notwithstanding this lack of data from parents with differing backgrounds, our results demonstrate important examples of soccer parenting perceived as facilitative by developing players. Previous soccer-specific literature (e.g., Holt & Mitchell, 2006) has noted how parents can be a potential obstacle to talent development in soccer if inappropriate parenting behaviours are adopted. Therefore, the behaviours of the soccer-fathers in the current study could serve to enhance current parent education literature for other soccer parents with a view to enhancing player development.

A final point of consideration here is that all of the players in the current study were from divorced-remarried parenting structures. Although players were not asked if they felt this had impacted on their development as players, literature investigating the impact of divorce on children has suggested that they can develop and utilise more self-regulation and coping strategies (Mo-Yee, 2002). As self-regulation and coping strategies have been cited in soccer specific research as distinguishing factors in soccer success (Holt & Dunn, 2004; Jonker Eleferink-Gemser &Visscher, 2010), examining the impact of parental structure on player development in soccer is a noteworthy future direction.

Soccer-brothers

Players in the current study all perceived their siblings as playing significant roles in their development as players. All of the players in the current study had at least one older brother that had played soccer from county representative squad level to full professional status (a *soccer brother*) and was important from the ages of 6-10 in helping them become interested in soccer. For example, Beth, Lisa and Amanda all reported that their older brother was the first one to invite them to go and have a "kick about" and they found this initial involvement enjoyable. Lisa also linked in that her brother had helped with her initial socialisation into soccer which helped her to cope with the nature of soccer players:

"It all started with my brother really. When I was younger, like 9, I used to go out there with my brother and we'd go play with some of the lads from school and their brothers and because of that I started playing in my local boys team at U10. After that I went

into the U12 boys' team and then started at current club's junior team]. I just really enjoyed getting out there and playing with them, it gave me a right buzz."

As players got older and had aspirations of elite soccer, the older brother of the female players would often act as a positive or negative role model. Contrary to previous sibling literature that suggests younger siblings may attempt to de-identify with older siblings (e.g., Sulloway, 1996), it was clear that players viewed their older sibling as a soccer role model and wanted to emulate (Azmitia & Messer, 1993) or surpass their brother's achievements. Unlike sibling conflict literature (e.g. Haggan, 2002), this desire to surpass the older sibling did not result in conflict. In fact, players perceived this desire to progress as strengthening the sibling bond. This was due to the older sibling's wish to help their younger sibling to succeed. In order to develop, players received advice about the brother's experiences and learned from these (cf. Azmitia & Messer, 1993). When invited to talk openly about how her brother had influenced her as a soccer player, Michelle offered the following observations about the lessons she had learned from her soccer brother as a negative role model:

"He had all the talent in the world and he was at [a professional club] from a really young age but he let it all go to his head. He thought he'd made it when he was 16 when really he should have known that you haven't made until you're like…David Beckham. He made lots of wrong choices like not looking after himself, going out drinking with his friends a lot and never really listening to his coach. My brother always thought that he knew better than everyone else. When I saw him get kicked out of [professional club], I saw how he reacted and now he'll advise me on his mistakes and that has helped shape my career"

Beth provided an alternative perspective regarding the positive role model effect of her soccer brother:

"He was a model pro. You can't question what he achieved in soccer. I learnt a lot from him about diet, nutrition and generally looking after yourself… If you don't look after yourself, you'll never make it as a footballer. Because of that, I'm not bothered about going out drinking and stuff and I really try to look after myself. "

Amanda provided a different context to the role of the soccer-brother. She discussed how deliberate play with her older brother had developed her as a player through exposure to position specific requirements and, ultimately, how this impacted on her early career:

"well, he always played right hand side of midfield, so I've ended up playing there too now. We took turns crossing the ball for each other all of the time. I used to be the person he'd aim for but then we'd swap over. Then we'd like act as defenders for each

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other and we'd race for the ball and stuff, so that was great for me because I'm really small so when I started playing soccer, I'm not being big headed like, but I was already really fast – I never liked [brother's name] beating me to the ball even though he always did! I was already good at running past people with the ball, could do tricks to get past people and I could cross a ball whilst I was running. Cos I was playing against some people who struggled to kick a ball, I really stood out."

These preliminary findings expand current understanding (e.g. Holt et al., 2009) to demonstrate part of the mechanism by which the older siblings exerted their effect. In addition, findings have added to current sport literature (e.g. Davis & Meyer, 2008) from same sex siblings by mirroring emotional and informational support related findings in siblings of different sex. However, as all of the players in the study were the youngest child in birth order, the findings do not allow for discussion of birth order effects.

Peer experiences

Peers emerged as a positive motivational influence on players in terms of both maintained involvement in soccer and as a resource for player development. Extending earlier literature (Ullrich-French & Smith, 2009), players discussed the notion of *soccer friends* (friends that were also team – mates) and *non – soccer friends* (friends that were from outside soccer, such as school friends). In doing so, players differentiated between the relative roles of these distinct groups on talent development.

Players received emotional support from soccer friends, particularly during times of difficulty, such as bullying, injury or being dropped from the team. For example, soccer friends provided social support that served to change Michelle's perceptions and understanding of female involvement in soccer and how peers at the age of 12 helped her to recover from being bullied for playing soccer:

"You know, as I was growing up I got bullied quite a lot because I played soccer. All the lads were like 'ah, you play soccer, you're a man'...and my first soccer team basically told my dad that I wasn't going to play because I was a girl, even though we were only 11 so I could play on the same team as the boys. I was like 'my god, am I the only girl that plays soccer?' I would say the main people that helped me get past that were my team mates. I got to my new club and it was all girls and it was like 'I'm not the only girl that plays soccer!' and they had all been through the same thing as me, you know the bullying and stuff, so they were the biggest support for me because they understood it when they'd been through it".

Whilst similar findings are evident in female physical activity settings (e.g. King, Tergerson & Wilson, 2008), to our knowledge this is the first finding of its type that has associated social support with the development of elite level female soccer players.

Between the ages of 12-14, female players participated in deliberate play (Côté, Baker, & Abernethy, 2003; 2007) against male players as this enhanced their enjoyment of soccer during a time when they felt a lack of development from playing against female players. Players saw this 'friendly' competition against male players as essential for development particularly because of the increased demands of playing against males and how this helped developed physical strength and perceptual skills (cf. Berry, Abernathy & Côté, 2008). Although from a small sample of elite youth female soccer players, the importance placed by female soccer players on the competition against male players is a pertinent finding in this study as it underscores the importance of tailoring female soccer to the needs of elite players during the sampling and specialising years. This has contemporary importance in the current structure and organisation of child and youth soccer in countries where age restrictions for mixed-sex competitions are currently in place. For example, in England, recent Soccer Association rule changes (rule C4 (a) (vii)) stipulate that female and male players can only compete against each other up to U13 level– the female players in this study saw such limits as disadvantaging their development as players. Other countries in Scandinavia and Central Europe have fewer restrictions which could influence the development of their players.

All of the participants discussed how peers, both soccer friends and non – soccer friends, helped them to lead a disciplined lifestyle. These included encouraging players to maintain their disciplined lifestyle and arranging activities that would allow players to socialise without any issues that could negatively affect soccer. Beth discussed how her friends had contributed to supporting her involvement in soccer and how this has changed as she has progressed as a soccer:

"My friends when I was younger always used to talk to me about soccer and stuff and like why I played it and things like that and they always seemed quite interested cos they knew I was good at it. When I think back, that was quite important because it made me think about why I played it and what I needed to do to keep playing. As we got older, and they started going out and stuff, they were never like 'oh just miss training and come get drunk with us' so not having that pressure helped me to avoid the temptation, instead they'd like say 'oh, shall we organise a night we can go bowling or go to the pictures when you're not busy with soccer?', which was important cos

sometimes you do sort of like feel that you have to miss out on being a teenager if you're going to be a good soccer player... As I've gone further up in soccer, like at youth international on the Women's Super League, some of my friends give me some banter about never seeing me… but that's good for me cos it shows that they still wanna be around me and they still make plans to see me."

These findings suggest that non – soccer friends brought a sense of 'normality' into the teenage lives of the players that helped them to focus on non–soccer matters. This fostered a 'time–out' period from soccer when a rest was needed. In addition, players reported that non – soccer friends would help them maintain a disciplined lifestyle by changing the plans of the social group to accommodate the player's needs. In one of the later discussions after she had started regularly representing [senior team], when asked about the role of her friends outside soccer, Michelle offered the following:

"My friends realise how important my soccer is to me so...they're not always like lets go out Friday, Saturday night or whatever, they're always like you go training get yourself sorted out and then we'll arrange a time to go to the cinema or something. They respect that I have to balance my life quite a lot, so they make time for me rather than trying to get me to do the things that I shouldn't really be doing."

These initial findings provide suggestions regarding the differing roles of both soccer- and non-soccer peers in talent development and warrants further in – depth qualitative investigation.

Early access to competition

All players retrospectively reported the importance of early access to competition as an essential part of the developmental experience. Of particular importance to them was playing soccer against boys up until the age of 12. Below, Beth explains her perception of the experiences:

"Yeah, it was really good playing against boys at that age because it gave me that competitive edge. You know, boys don't want to lose to the girls because boys can't lose to girls, and girls don't want to lose to the boys because they want to prove that they can play soccer as well so that's where I got my competitive edge and it just grew from there. Playing against boys who were bigger and stronger was better for me cos it developed me physically I think, but also because the standard of girls soccer at that age was never as good as the boys so yeah, I found it really beneficial playing against boys".

As noted by Amanda however, she thought it was important in her development to play with male players in unsupervised games "I was as good as, if not better than a lot of the boys I played against, but the FA said we're not allowed [to carry on playing against boys after the age of 12] ... I just carried on playing against lads outside the organised games because they were so much better than any of the girls I played against."

Coach

The data presented provided a female youth specific insight into the perceptions of the roles of coaches and understanding player – coach relationships. Fasting and Pfister (2000) reported that elite female players viewed female coaches more positively than male coaches due to a greater understanding of the needs of female players on the part of female coaches. In this study, male coaches were often reported to have unrealistic performance-related expectations. Michelle reported:

"I think there is a big difference between working with male and female coaches. I think male coaches in general treat women's soccer the same way as they treat men's soccer and they don't realise that women physically can't do the things that men can sometimes. When I'm coached by women, I find they treat us as women and women footballers rather than expecting us to be men! The male coaches tend to expect us to do things faster because that's what they're used to with men and when we can't they just tell us to do it better or do it faster and my head just goes straight down because you don't know what they expect to you to do."

However, three players preferred working with the male coaches due to greater perceived technical coaching competence. Beth discussed some of the differences she has experienced and how they have affected her development:

"It's like, I know technically male and female coaches should be as good as each other as they have to do the same coaching badges and stuff, but I just think that the male coaches that I've worked with are so much better in some ways. Like my coach now, he pays so much attention to detail in everything, he knows each of the different players individually and knows each of our individual needs and because of that we get so much more out of working with him. I've never really had that with a female coach."

Furthermore, some players in the current study did not report the same communication problems reported by Fasting and Pfister (2000). Beth provides an insight into her experiences:

"I don't really feel comfortable talking to women managers...but with male managers I feel like I can talk about anything. Like with my club manager now, he is always there

for me, he always wants the best for me and he will do anything to make sure that his

players are happy; I've never really had that with a female manager. At international

level, it is harder to form relationships with the manager as well because you don't see

them as often and you don't know them as well, so I've always found it easier to form

relationships with my club manager."

The positive experiences with male coaches reported in this study could be explained

by the positive relationship that female players developed with other significant males in their

life (e.g., soccer fathers, soccer brothers) and how the players had become accustomed to

talking to males about their soccer performance. However, when the communication pathway

was reversed with the coach providing information to the player, each player reported

negative coach interaction due to inappropriate communication styles (cf. Holt, Tamminen,

Tink & Black, 2009). These findings suggest a need for further coach education relating

specifically to the needs of female youth soccer players.

Self–reflection and volitional behaviour

During the course of the study, Beth's career progressed the furthest. She regularly

represented a senior team in the highest level of women's soccer in the UK and amassed the

highest number of international caps. Towards the end of the first season, all players were

asked what they thought they needed to do to be able to progress in their soccer career.

Interestingly, Amanda, Lisa and Michelle's responses were limited to statements such as

"keep working hard and hope I get the call" or "listen to my coaches and see where I can go

from there". During one of the fieldwork sessions, Beth provided a response that

demonstrated she had volitionally taken a reflective stance on her own soccer performance

and had identified strengths and areas for improvement that she was trying to work on:

"…because I really want to move into the senior international team now, I've started

watching the senior internationals and the senior players in my team a lot more now to

try to figure out what it is they have that I don't. I know it's a team game, but when you

want to play for [international team] it's almost like you're competing against your

team mates as well. I've noticed that I need to work more on my left foot because

[senior international player currently playing in Beth's position] is miles better than me

with both feet. My right is really good but when I come inside, I need to be better with

my left so that I have a better range of passing."

In addition to reflecting on her soccer performance, Beth also reported using goal,-

setting strategies and psychological skills training techniques (specifically self-talk,

affirmations and imagery) as coping strategies and for performance enhancement. As self-

reflection and volitional behaviour are key aspects of self-regulation, we considered self-regulation literature to interpret the potential impact of Beth's behaviours.

Implications and Conclusions

The current study has provided an account of the developmental experiences of elite female youth soccer players and has placed these experiences in a CSA of events bound by age ranges. A key strength of this research has been its ability to highlight links between elite female talent development and positive youth development by suggesting a reciprocal, cyclic link between these two areas, as well as mechanisms behind the link. Specifically, we have illuminated the role of *non – soccer friends* in helping developing female players to maintain the disciplined lifestyle required for talent development in soccer. Moreover, the importance of informational support provided by *soccer brothers* and *soccer fathers* have been brought to the fore; as have the mechanisms by which soccer fathers can positively influence the talent development of their daughters through the interaction of high level informational support and understanding the needs of their daughter – players. Finally, we have interpreted self-regulative characteristics including self-reflection as factors that can potentially differentiate the rate of development of female players at youth elite level. From these initial findings stem several important research and practice implications. Firstly, it is important to acknowledge that the sample size, homogeneous nature of the sample, and the family structure (i.e., having a father and / or brother with playing / coaching experience in high level soccer) of the players investigated potentially limits generalizability, Therefore, it would be prudent to study those young female players who do not have access or exposure to similar environmental factors and conditions. Secondly, given some of the clear developmental stages and transitions that these young female players experienced, there is an opportunity for research to target the demands of each specific transition with greater scrutiny. For example, prospective longitudinal research with players from 10-14 years old may help to understand their challenges and resources in more depth (e.g., how young females cope when they are no longer able to compete with boys in mixed teams; in order to inform this policy). Thirdly, by using the visual progressions of the CSA and relevant quotes from participants, the content and messages of educational workshops for parents, adolescent players and coaches may be strengthened. Managing friendships, a disciplined and committed lifestyle, and self-reflection are a few key educational themes reinforced by this research.

In sum, study two provides the starting point for a thoughtful dialogue between scholars, practitioners, clubs and federations to inform the development of female youth soccer players. However, this study reinforces the absence of players who were unsuccessful

in their attempts to achieve a professional female soccer career in the UK as well as contributing to the under-representation of significant social agents. In accepting this, study three seeks to address these lessons by learning lessons from negative case players, with a view to extending current understanding by challenging existing assumptions (Holt & Mitchell, 2006).

Chapter 5: A holistic perspective on career development in UK female soccer players: A negative case analysis.

Dissemination arising from this chapter:

Gledhill, A., & Harwood, C. (2014, September). *Intentions vs. Perceptions: Coach-player Interactions in Female Youth Soccer.* Presentation to the 4th International Conference of Qualitative Research in Sport and Exercise, Loughborough

Gledhill, A., & Harwood, C (2014, October). *A Negative Case Analysis of Talent Development in UK Female Soccer.* Presentation to the 29th Annual AASP Conference, Las Vegas

Gledhill, A., & Harwood, C. (2015). A holistic perspective on career development in UK female soccer players: A negative case analysis. *Psychology of Sport and Exercise*, *21*, 65 – 77.

From the last study, a knowledge base gleaned from elite female youth soccer players was reported and sequentially structured using a CSA. This provided a more developmental understanding of female soccer players' careers, however this did not shed light on the experiences of those who were unsuccessful in their attempts and the views of significant social agents were not sought. Therefore, study three seeks to address this limitation by examining the career experiences of negative case female soccer players from the UK.

Within sport psychology literature, the notion of dual careers (i.e., combining sport and education; sport and employment) has gained momentum to the point where it is now considered an international topic that is visible in research from across the globe, including Europe, North America, and Australia (Stambulova & Ryba, 2014). Given that athletes invest significant time and effort into their sporting and life development careers (O'Neill, Allen, & Calder, 2013; Stambulova & Wylleman, 2014) it is perhaps unsurprising that this body of research has gained such momentum, with scholars aiming to support athletes with attaining an optimal balance that will allow them to successfully navigate key life changes, such as; junior-to-senior career transitions, progression through education, and progression to post-sport careers (e.g., Stambulova, Engström, Franck, & Linnér, 2014). As young athletes grow on sporting and interpersonal levels, the number of transitions they face increases and the congruency between their internal and external resources and the demands of a career transition will more likely result in a successful within-career transition (e.g., Alfermann & Stambulova, 2007; Holt & Dunn, 2004). As such, recent research-informed political attention has been given to how young athletes might best be supported with their dual careers (e.g., European Commission, 2012).

Despite the importance of athletes' dual career investments, how athletes view themselves and their endeavours within their dual career experiences is reported to be under-investigated (Cosh & Tully, 2014). Moreover, studies that have investigated dual career experiences have tended to investigate multiple sports and both male and female athletes (e.g., O' Neill et al. 2013; Stambulova et al. 2014). Whilst providing valuable into dual career experiences, multi-sport studies may not be sensitive to the nuances of a single sport. One sport that presents quite unique dual career demands on young athletes, is soccer (Christensen & Sørensen, 2009; Larsen, Alfermann, Henriksen & Christensen, 2013; McCormack & Walseth, 2013).

Recently, female soccer has grown in stature on a global scale, with 29 million players across the world (Scott & Andersson, 2013) and greater attention now being paid to the development of elite level female soccer players. For example, Fédération Internationale

de Football Association (FIFA) has championed the development of women's soccer on a global scale. As part of this, FIFA (2014) released its women's soccer development programme guidelines (2015 – 2018). This document includes ten key principles for the development of women's soccer; these principles include sustainable and professionalised competitions for female soccer, and having an expert knowledge base involved within decision making. Central to a sustainable professional competition is a sound knowledge base that can promote the effective career transitions – in the context of this study defined as normative or non-normative turning phases over the course of a female soccer player's career (cf. Alfermann & Stambulova, 2007) - of female soccer players. In addition, FIFA's individual nations have developed bespoke soccer development strategies. For example the English Football Association (FA) launched their 'Game Changer' strategy for developing women's soccer (2013-2018) in which they cite the effective transition of youth players to adult players as an important part of the strategy (FA, 2012).

When experiencing player development centres[4] in the UK, female youth soccer players will often be balancing dual careers in education and sport, as well as attempting to reconcile these within the different stages of adolescence. As a result, these demands may threaten a player's ability to successfully transition the different stages of their career (e.g., from development to mastery/perfection stages; Wylleman & Lavallee, 2004) or lead to voluntary dropout (e.g., European Commission, 2012). Considered alongside the aforementioned growth and development of female football in the UK, this suggests that greater understanding of talent development and career transitions of female players in the UK may serve to facilitate the balance of players' dual careers and, thus, help to keep talented young players in both their soccer and educational systems. Despite this, little scholarly attention has been paid to these factors female soccer players (McCormack & Walseth, 2013). This is an important consideration for the body of research given that it further demonstrates historically reported trends that female athletes in general are typically under- represe nted in sport psychology literature (e.g., Conroy, Kaye, & Schantz, 2008; see study one); that female and male athletes will typically have qualitatively different developmental experiences (e.g., Gill, 2001); and in order to extend culturally specific understanding, marginalised groups of athletes (such as female soccer players) need to be more visible in dual career research (e.g., Stambulova & Ryba, 2013; 2014).

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[4]We use this term to refer to any form of player development centre on the girls' soccer talent pathway in the UK (e.g., Centre of Excellence).

With this lack of gender-specific understanding in-mind, study two sought to examine the developmental experiences of elite UK female youth soccer players. Using interviews and fieldwork, it highlighted the meaning attached by elite female soccer players to important psychosocial factors such as support from parents, siblings, soccer friends, non-soccer friends and how they impacted on important developmental factors such as leading a disciplined lifestyle. Moreover, self-regulation and adaptive volitional behaviours were identified as key intra-individual competencies that are central to talent development and career transitions in female soccer players. Finally, using a composite sequence analysis approach, study two sequentially structured these developmental experiences which provided a more plausible and *developmental* understanding of how the different factors associated with talent development changed over time, with the key benefit being that this could then serve to provide applied practitioners with age- and gender-specific advice about important social agents that can positively impact on the development of female soccer players. Despite this, study two was limited by a small and homogenous sample of elite female youth soccer players, which creates the questions of how these research findings inform our understanding of those soccer players who have not favourably transitioned from the development to the mastery stage of their career and highlights a need for a wider range of viewpoints from which researchers can glean a more holistic perspective.

Whilst existing soccer literature allows for inferences to be made about dual careers in soccer, most of these are underpinned by literature examining talent development in soccer and then subsequently extrapolating these findings in to the wider context of career transitions. This has included identifying psychosocial assets of soccer players who are considered elite in their domain (e.g., study two; Holt & Dunn, 2004; Van Yperen, 2009) and examining the views of those tasked with developing male soccer players to an elite level (e.g., Morgan, McKenna, & Nicholls, 2014) in order to suggest qualities that will facilitate normative career transitions in soccer. Frequently, literature has provided confirmatory findings that support the notion of important player-level assets (e.g., resilience, self-regulation) and/or socio-environmental factors (e.g., parental, peer or sibling support) that may positively influence talent development. Collectively, these factors can be conceptually linked with developmental stages offered in non- soccer specific athlete transitions models (e.g., Stambulova, 2003; 2009; Wylleman & Lavallee, 2004) to allow scholars to understand how players may make successful career transitions. However, given the significant level-bias towards elite youth or adult soccer players, it is difficult to understand the differences between those who *do make it* and those that *don't make it* in female soccer. Therefore, to

extend current understanding about the complexity of the developmental experiences of female soccer players in the UK from a more holistic perspective, research that examines experiences of lower level players or less-successful players is warranted. One way to address this gap is to adopt a negative case analysis approach (NCA; Denzin, 1989) with female soccer players.

Negative cases have been rarely used in sport psychology literature despite being a well-established strategy for revising and extending existing levels of understanding (Holt & Mitchell, 2006). A proposed benefit of the NCA approach is the potential for it to encourage researchers to question pre-existing assumptions about a phenomenon (Patton, 2002) with a view to broadening understanding and encouraging change where required. For this reason; we argue that a better understanding of the developmental experiences of female players who have not advanced to the highest levels of female soccer in the UK (despite having experienced a female talent development pathway) will extend existing sport psychology literature as it provides the opportunity to produce a grounded theory of talent development and career transitions in female youth soccer.

Whilst grounded theories of talent development in soccer are present in the existing literature (e.g., Holt & Dunn, 2004; Holt & Mitchell, 2006) these are not culturally or contextually sensitive to the experiences of UK female soccer players. Moreover, existing literature on dual careers (e.g., Stambulova & Ryba, 2014) has reported that research adopting a holistic perspective (i.e., combining a whole person, whole career and whole environment approaches) is a challenge that will enable scholars to extend current understanding. Combining these arguments with recent calls for contextually and culturally specific understanding in sport psychology literature (e.g., Clarke & Harwood, 2014; Stambulova & Ryba, 2014), we contend that a grounded theory approach is warranted. As such, we aim to provide a rich understanding of the experiences of these UK-based negative case players along with other key social agents in order to develop a substantive grounded theory that makes proposals about enhancing the chances of talent development and successful career transitions in UK female soccer.

Method

Ontological and epistemological assumptions

In a move away from the dominant positivist/post-positivist perspective in dual career research (Stambulova & Ryba, 2014) we approached this study from an interpretivist philosophical perspective. This perspective focuses on understanding the meanings, purposes and intentions that people attach to actions and interactions therefore could serve to provide

clues as to the kind of decisions the players made throughout their developmental experiences. This perspective is consistent with a relativist ontological position in that there are multiple co-existing realities among individuals (Corbin, 2009).

Grounded theory methodology and methodological congruence

Grounded theory was most useful in this instance where we aimed to generate a substantive theory relevant to this particular area of study with the purpose of offering insight as a basis for future research in an area that has received little empirical or conceptual analysis (Creswell, 2013; Corbin & Strauss, 2008). We used Corbin and Strauss' (2008) variant of grounded theory to address the research problem. This variant of grounded theory embraces the constructivist viewpoint in that "concepts and theories are constructed by researchers out of stories that are constructed by research participants who are trying to explain and make sense out of their experiences and/or lives, both to the researcher and themselves" (p.10). Corbin proffers that generating concepts in this way serves to increase understanding of peoples' everyday lives, whilst also leading to discussion and debate which can further develop understanding. This mode of concept generation is consistent with our rationale for the adoption of a NCA-based study. Therefore, the selected variant of grounded theory was consistent with the philosophical underpinning and aims of our study, thus demonstrating methodological congruence (Mayan, 2009).

Theoretical sensitivity

Whilst one can arguably not enter a study with a completely clean slate; Corbin and Strauss (2008) do contend that new grounded theory studies should not begin with a pre-determined framework or set of concepts. There are certain exceptions to this; including when existing frameworks can be used to demonstrate how a phenomenon is only partially understood, thus providing a conceptual context from which research progress (Maxwell, 1996). In the context of our study and consistent with Corbin and Strauss' (2008) viewpoint, we used existing literature (e.g., study two; Holt & Dunn, 2004) to: (a) affirm only partial understanding of talent development and career transitions in female soccer; and, (b) develop initial questions and ideas for theoretical sampling.

Sampling and participants

Purposive sampling (Patton, 2002) was initially adopted as grounded theory research begins by recruiting participants who are presumed to be able to provide data that will best address the research problem. Accordingly, after gaining institutional ethical approval, participants were invited to take part in a study about women's soccer and were told that the over-arching aim was to provide recommendations for enhancing the chances that female

soccer players would have a successful career within soccer. We sampled 13 female participants (M age = 19.61 ± 1.19) who were initially retrospectively interviewed about their experiences as a developing female soccer player. They had accessed player development centre coaching for between 3-7 years (M = 4.62 years ± 1.85) prior to withdrawing from competitive soccer. The mean time since withdrawal from soccer ranged from 1-4 years (M=2.28 ± 0.9). Inclusion criteria were that participants were (former) female soccer players aged 18 or over (this is normally the age that access to player development centre coaching at a local or regional level ceases) who have experienced a player development centre programme but not progressed into either Women's Premier League, Women's Super League, or international teams at either age-group or senior international level. All participants in the study had successfully transitioned through compulsory education and post-compulsory (16-19 years old) education in the UK. Nine of the 13 players in the study were working towards a higher education qualification at the time of the first interview and two had successfully completed a higher education qualification at the time of the first interview.

Data was collected through in – depth, semi – structured interviews with players (n=13, ranging from 42 minutes – 91 minutes). The interview guide was based on previous soccer-specific talent development literature (study two; Holt & Dunn, 2004); and was provided to players prior to the interview so that they could consider the focus and nature of the interview to increase the richness of data (cf. Christensen, 2009). Players were questioned about their experiences of growing up as a female soccer player (e.g., Can you talk to me about what it was like growing up as a girl that was good at soccer?; What challenges did you face as a female soccer player?); Peer-relationships (e.g., Did / How did your friends in / out of soccer help you to develop as a soccer player?); Parents (e.g., Can you talk to me about your parents' involvement in your soccer career?); Coach relationships (e.g., Can you talk to me about your relationship with your coach/coaches?; What types of activities did you do at practice?; Did coaches pay equal attention to different aspects of your development, such as technical and psychological?); and the interview guide was refined and developed as interviews progressed. Interview questions consisted of main questions, probe questions, and follow – up questions to ensure accurate understanding of responses (Rubin & Rubin, 2005). Data was recorded and transcribed verbatim.

Data collection and analysis was an iterative cycle. Analysis began as soon as the first data were collected (Corbin & Strauss, 2008), with initial analysis leading to further data collection, theoretical sampling and data analysis (Holt & Tamminen, 2010). Throughout the

initial 13 interviews with players and the subsequent data analysis, a number of concepts emerged that led to the theoretical sampling of additional social agents who were deemed to have influenced the players' developmental trajectory (see Fig.5.1). As emerged relating to the player-coach dyad and role strain, we sequentially sampled the following: Former coaches of the players (N=4; male = 3, female = 1), the best friend (N=13; female = 13) and former teachers (N=8; male = 6, female = 2).

Fig. 5.1: Theoretical sampling

Coaches were qualified to UEFA 'B' (n=3) and UEFA 'A' (n=1) license level, coaching experience ranged from 6 – 24 years, and all coaches had experience of coaching male and female players (including coaching female players who have progressed to either youth or senior female international soccer). They were theoretically sampled to glean information about the concepts of coach-player relationships, coach-team mate relationships, coach perceptions of female soccer, and coach perceptions and experiences of players of working with players of different ability levels. Coaches were interviewed first about their views on female soccer and how it had developed in recent years. Interviews with coaches ranged from 30 – 113 minutes. This initial unstructured element was to develop an interview rapport with the coaches to facilitate the richness of data (Rubin & Rubin, 2005). As the interview progressed, we then discussed the coaches' behaviours in a more general manner (e.g. "Can you tell me how you try to engage a broad range of abilities in single coaching sessions?"), followed by progressing the interview on to more specific aspects that the players had raised (e.g. "Have you ever witnessed times when players have been given preferential treatment by coaches because of their advanced playing ability?").

Interviews with the player's 'best friend' centred on the social experiences of being an adolescent female to examine the concepts of peer relationships, the nature of peer relationships, factors affecting these peer relationships and the impact of peer relationships on talent development and career transitions. Interviews ranged from 42 – 45 minutes. These interviews began with the first author posing questions regarding the lived experiences of the peers (e.g. "Can you tell me about your friendship with…during your time at school/College?"). Questions increased in specificity to the social life (e.g. "Can you talk me through your social lives during your time at school /College?"). Finally questions progressed on to relationship specific questions (e.g. "Did you ever play a role in helping your friend develop as a football player?" or "Can you talk me through your most memorable moment with your friend?"). No data was recorded regarding the length of friendship; however events recounted indicated that friendships had been in place for at least six years at the time of first interview.

Teachers were qualified to Masters level (n=6) or undergraduate level (n=2), all of which were in either leisure studies, sport and exercise sciences or physical education related areas. Their teaching experience ranged from 5-23 years. All teachers were in possession of a relevant post-graduate level teaching qualification and they had worked with players in teaching and/or pastoral support capacities for two years. They were theoretically sampled to examine the concepts of: teaching talented female soccer players; teacher – player relationships; teacher – parent relationships; teacher views of female soccer; and the career prospects of female soccer players. Teacher interviews also had an initial unstructured element that centred on the teachers' experience of working with talented athletes (e.g. "Can you tell me about a time when you have taught or tutored a talented young athlete?"). After this, interviews progressed on to more specific aspects of the teaching experience (e.g. "Can you talk me through any of the challenges of teaching talented young soccer players?"). Finally, the interviews progressed on to more specific issues presented during the player interviews (e.g. "How do you try to support talented young soccer players to reconcile their roles as student-athletes?"). Interviews with teachers lasted 37 – 52 minutes.

These additional social agents were sampled to gain a richer understanding of how the different interactions between multiple social agents could impact on talent development and career transitions in female soccer, with the intention of achieving theoretical saturation (Corbin & Strauss, 2008). Data collection was discontinued when it ceased producing new insights (cf. Morse, 1995).

Data analysis and methodological rigor

We engaged in iterative data analysis with a view to achieving an adequate level of theoretical saturation (Corbin & Strauss, 2008). Theoretical saturation is the point in analysis when all categories are well developed with respect to properties, dimensions, and variations; where further data gathering cease to add (or add little) new conceptualisation (Corbin & Strauss, 2008). This was achieved through reflexive practices (e.g. memo writing, diagramming), critical debate and member reflections (see below). Three stages of coding were used during data analysis. First, open coding was conducted with the audio and written data to identify the initial concepts and their meaning for talent development and career transitions in female soccer. For example; initial concepts of 'peers' perceptions of female soccer', 'peers' role in lifestyle choices', and 'soccer peer expectations' were constructed from the data and subsequently grouped under the initial category of 'player - peer interactions'. Through axial coding, relationships between concepts and categories were explored so that we could form more precise categories. For example; 'player-peer interactions' was explored further and broken down into more precise categories of 'player and team-mate interactions' (which was refined further still to 'coach, player and team-mate interactions') and 'player and non-soccer peer interactions' (which was later refined further still to 'player, non-soccer peer and sibling interactions'). During theoretical integration (Corbin & Strauss, 2008), we re-constructed the data into the explanatory model (Fig. 4.2) in which we encapsulated the relationships between the core and underpinning categories.

Memo-writing and diagramming were used to explain and develop relationships between concepts and to aid reflexivity on the part of the researchers (Corbin & Strauss, 2008). Diagramming primarily was used to develop the appearance of the theoretical framework and to organise thoughts about the relational nature of concepts.

Member reflections (Tracy, 2010) took place to allow a process of elaboration and collaboration with the research participants to "throw fresh light" (Bloor, 2001, p. 395) on our interpretations. The first author individually presented participants with results and asked them to openly critically comment on the findings (e.g., did the quotes display what mattered and the [multiple] meaning[s] behind what mattered? What thoughts did they have about the theoretical framework and proposals?). Two other experts in sport psychology literature, including the second author (both of whom have extensive experience of grounded theory research), one female soccer coach with extensive experience of playing and coaching women's soccer in the UK (otherwise unrelated to the study), and one male Head of Sport Science and Medicine with extensive experience of working with talented female youth

soccer players (otherwise unrelated to the study) were also asked to comment on the general presentation of the diagram and the theoretical proposals. Collectively, comments contributed to the final layout of the theoretical framework. These processes were designed to add to the credibility of the research by examining the degree to which participants and other potential 'end-users' of the research found it both comprehensible and meaningful (Tracy, 2010).

After producing the final theory and confirming the central proposals, we conducted an extensive review of literature. Initially we focussed this review on studies that demonstrated positive cases of talent development in soccer (e.g., Gledhill & Harwood, 2014; Holt & Dunn, 2004) or factors considered important for talent development in soccer (e.g., Mills et al. 2012; Morley et al. 2014). This was followed by a broader consideration of wider literature associated with developmental considerations presented through the grounded theory, such as; learning (e.g., Eisenkopf, 2010), self-regulation (e.g., Toering et al. 2009), role strain (e.g., Goldberg & Chandler, 1991), career transitions (e.g., Stambulova et al. 2012) and dual career experiences (e.g., Stambulova et al. 2014). In doing so, this allowed us to permeate into our analysis the second viewpoint of the cultural praxis (i.e. the culturally sensitive overlap between theory and practice, and the enactment of practical ideas) of athletes' careers paradigm (Stambulova & Ryba, 2014). This highlights the need for inter- or trans-disciplinary understanding when interpreting athletes' lived experiences, as they are too multidimensional and interactional to be fully grasped through one perspective alone. The focus of the extended, post-theoretical literature review was to consider the oppositely congruent nature of our themes with existing positive case-based literature; in order to refine and interpret our findings (Strauss & Corbin, 1998) in a positive frame, to lend conceptual support to the proposals that an absence of these negative conditions may lead to a greater chance of talent development and successful career transitions in female youth soccer.

Results

The processes outlined in the method led to the development of a substantive grounded theory of talent development and career transitions in female youth soccer that was constructed around the core category of optimal social interactions enhancing the chances of successful talent development and career transitions. In the context of this study, we define social interactions as communications or collaborations involving two or more people that can influence the way in which those people work with each other within a talent development and career transitions social milieu. This core category is underpinned by two categories: (1) Developing a supportive soccer talent development context; and (2) Developing the player. With reference to these categories, the first part of the results

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demonstrates the experiences of players and other social agents influential in talent development and career transitions in female youth soccer. In keeping with the interpretivist nature of the study, we have used multiple sub-headings and rich quotes from multiple participants to piece together the implicit meaning (Cresswell, 2013) of these experiences for the career transitions of female soccer players in the UK. We adopted this tactic being mindful of the following: the need for clearly articulating the multidimensionality of career transitions (Stambulova & Alfermann, 2009) on intra-individual and socio-cultural levels; and in an attempt to answer calls for a greater interactional understanding (i.e., between the player and their environment) of developmental experiences in soccer (e.g., Mills et al. 2012). Finally, the grounded theory and key theoretical proposals are presented at the end of the results.

Player, teacher and parent interactions, and role strain

Between the ages of 13-15 years, it was clear that normative behaviours in the players' social circle pointed towards more of an 'adult' lifestyle which players were drawn in to. By 15 years old, many of the players in our study had started to place greater value on their 'normal teenage' identity as opposed to their 'soccer' identity. This was primarily due to the normative social behaviours of non-soccer peers and, where applicable, the player's older sibling (s). As players moved between 15-17 years old, players and their best friends began to place greater emphasis on going out drinking with friends. Players reported doing this on the night before training or games and sporadically missing training or games because of their resultant 'hangover'. This would often be disguised to parents by telling parents that they "felt ill" [Jordana] as players reported that often their parents "Didn't have a clue what I was doing because I just said I was staying at a friend's [house]" (Leigh-Anne; Bryony).

From 14-16, players also experienced significant role overload from their teachers as the important General Certificate of Secondary Education (GCSE) examinations took priority in education. Given the importance of the GCSEs for one's educational future, teachers engendered or enforced the 'student' role identity of the players, often drawing on parents to reinforce this. As such, it was during this age that players further developed their non-soccer role identity, despite them still being actively involved in soccer.

From 16-18 years, players were socialized further still into non-soccer role identities, despite many of them wanting to – at 16 – still focus attention on playing football. Specifically, players cited teachers discussing that "girls can't be professional soccer players yet as there isn't a structure for it" (Jemima), parents invariably supporting the standpoint of teachers and prioritizing education over soccer, and, in some cases, coaches emphasizing the

importance of education (e.g. "If I ever said I was struggling with school work, my coach always told me that was the priority" [Bryony]). During this time period, parents would often support the teacher's requirements for educational success, even to the extent of banning players from attending training or games unless they had caught up with work.

Teachers highlighted different approaches to student support between elite and non-elite players from the point of view of facilitating their soccer involvement. The teachers' professional outlook appeared to be underscored by the playing level of the student-athlete and the teacher's perception of whether the player had a chance of 'making it':

"I work differently with the girls who are representing [youth international team] to those who aren't because I know they are the ones who might make some sort of career out of it…plus there's no point me trying to stop them going off to camps because they'll just go anyway and I know that their mum or dad will support them in that decision. It is easier for me to get the parents on side if their daughter doesn't play for one of the top teams or play at youth international level because then I can justify their education and can reconcile the greater value of it against their football. Yes, I would love for them all to make it because that is their passion, but I know that most of them won't so I have to meet that demand for them as well, as much as they don't like it sometimes." (Michaela).

Jack (a teacher) demonstrated a different perspective that highlights the role demand of teachers and the impact of institutional demands on teachers' decision making:

"It's great that we have some talented student-athletes. Good for the marketing for [College]. But they have to realise that they are students first and athletes second. I have to get them through their qualifications and if I don't, I get my boss on my back. Most – if any – of these [players] won't have anything like a professional career so I need to make sure that the end result for them, and me, isn't a fail statistic. If soccer has to go for me to ensure that, then so be it."

Player, non-soccer peer and sibling interactions, social competence, and role strain

The following passages provide evidence of the female players' inability to manage the role conflict that emerged between their role as a female soccer player and their role as an adolescent female. Players had witnessed the lifestyle of youth international players (usually their team-mates or close friends within soccer) and did not want to have to give the commitment required to maintain that lifestyle:

Leigh-Anne: "I mean like, I saw what the [international] girls had to do to play there; keeping food diaries, training every day, away from their family playing all the time, 'don't do this, don't do that'; no way was that for me!"

Maladaptive lifestyle choices (e.g., prioritising social life, nights out drinking over soccer as they entered early – mid teenage years) were key indicators of a lack of discipline, lack of sacrifice and, thus, a lack of social competence:

Leigh-Anne: "I could have been like 'no, I want to concentrate on this [my soccer]' but I didn't, I'm quite easily led in a way and I just wanted to be like everybody else…"

All players reported having non-soccer friends who were focussed on leading a 'normal teenage lifestyle' involving lots of nights out drinking. This impacted on the role strain experienced by players as there was a degree of role conflict between the 'female soccer player' role, and the 'adolescent female' role. Developing players tended to be encouraged by peers to 'follow the crowd'. Some players felt they lacked a peer social support network that would help them to lead a disciplined lifestyle. For example, when asked if she felt she had that type of support, Bryony responded with "no, not really…sometimes my team-mates were even worse than my friends outside soccer for that!" and Melanie (her best friend) recounted numerous examples of their social lives as crystallising experiences in their friendship:

Melanie: "I think my best memory is a house party at mine when we were about 13. My parents weren't there so we had loads of friends round and raided the spirits cabinet. We did not feel well after that! Then I remember the first time we went into town together. We were about 16 and because we were bigger than a lot of people our age, we could get in everywhere, but Bryony's big sister came with us just in case [laughs]. We thought that if we had some older people with us it would make it easier to get in places."

Other players appeared concerned about their peers' perceptions of their sexual orientation, a perception that players felt was created by them playing soccer. The passage below from Leigh-Anne demonstrates how these factors combined to influence her lifestyle choices:

Interviewer: Did you ever find it difficult being a teenage girl that was good at soccer?

Leigh-Anne: "Ha ha! Fucking hell yeah! Nobody played soccer near me! Everyone thought that girls that played soccer were just lezzers [a colloquial term to indicate

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peers believe female soccer players are homosexual] which when I look back now doesn't matter; but at 13, 14, 15 it's hard if all your mates are saying that…and all my mates just wanted to get pissed. I think I had my first drink when I was about 13 because that's what all my mates did. When I got to like 15 or 16, everyone just wanted to get out into town so that we could seem like we were more grown up. By the time I was 18 I was just playing soccer for fun really and I didn't really need to work that hard to be good"

Player, coach and team-mate interactions; psychological wellbeing and behavioural disaffection

Coaches and players in our study reported coach level behaviours that players perceived as inequality of opportunity, thus threatening a player's psychological wellbeing. Players referred to this perceived inequality of opportunity as coaches having 'favourites' within the team. These favourites were perceived to be the youth international or regular first-team players:

Jordana: "when you're looking at players like [first-team player] and they're pretty much allowed to do what they want, you kind of think 'well, why should I bother?' The coach definitely had his favourites and a lot of us just felt left out most of the time because we weren't as good as them. I hardly ever had any one-one feedback from my coach because he was always more bothered about getting the best players sorted out, but if I ever did anything wrong he'd bollock me…but if they missed training cos they basically couldn't be arsed for whatever reason, he never said anything to them."

Interviewer: How did you feel about that?

Jordana: "It was weird for me. Like I played soccer since I was like 10 and I've always been pretty good to be fair…well alright, better than a lot of people (laughs)…but like when I played at the centre, I started and went straight into the first team after the first training session, and thought 'this is great' but then I'll always remember the coach's first team-talk…he said to us that we had to make sure that we got the ball to either [youth international player] or [international rep squad player] as much as we could because we were playing [the best team in the league]. I just thought that we may as well all just fuck off home and leave them to it! … I just felt like I was rubbish, like the coach didn't trust us with the ball when he kept saying just pass it to [youth international player]…I didn't tell him that though."

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Some of the players in the study that had been highlighted as 'better' players by their coaches reported a lack of concern about their lifestyle choices at the time because they knew they were technically more competent than their counterparts.

Melissa: "I knew I was better than a lot of the other players so wasn't too worried and I knew that the coaches wouldn't say anything to me"

Interviewer: Can you give me an example of what you mean by that?

Melissa: "Well, like when I went on the lash [a colloquial term to indicate a night out drinking alcohol with friends] one student night and got absolutely smashed [a colloquial term to indicate becoming inebriated]. I texted my coach the next morning and said that I couldn't make training cos I was ill. He asked if I was ill or if I'd been out. I just said a bit of both really and his first response was asking me if I'd still be ok to play the day after because it was a big game and he needed me there."

Interviewer: So how did this approach from your coach make you feel then?

Melissa: "To be fair, I knew I could pretty much get away with what I wanted. As long as I turned up and performed, I don't think he was too bothered. Yeah, it was like that for a few of us because we were better players so the coaches gave us a bit more leeway than some of the players that weren't as good"

In order probe this notion further, we asked Geoff (coach) if he had ever witnessed or even adopted such approaches:

"[After pausing for thought and making eye-contact] Yes. The prestige of having a girl get to youth international from your centre is important. It is a way of attracting more players, adding credibility to the work you do etc. Sometimes that means the better players get more attention than the other players, sometimes that means they get preferential treatment when they might want to miss a session here or there if they don't think they need to attend."

The coach and player-level findings from this study suggest that coaches were viewed as, and felt, technically and tactically competent or confident; yet were less-so with the psychosocial development of their players. For example, Eleanor highlighted how her coach would tell her frequently "you need to be more confident", but did not offer any advice about how she may develop this confidence, nor did he ever explain to her why he felt she lacked confidence beyond saying she was quiet. Similarly, Bryony commented how her coach told her "you need to be less scared when you're a goalkeeper" but was unable to support her development, telling her "it is something that will come to you eventually". Michael articulated some of the problems facing coaches in girls' soccer:

"I think a key problem is that we don't have the expertise, is that the right word? Yes expertise or probably the knowledge…to be able to provide everything the girls need. Don't get me wrong, I'm a coach and I'm a bloody good coach. Put me on the grass and I'm happy, but am I a sport psychologist or a lifestyle consultant or whatever else? No. Do we have the potential to offer everything a player needs? With my contacts, yes. With the money we get? …I would love to, but it goes back to what I said earlier, the money needs to go to coaching the players."

Players reported a perception that the higher level players had unrealistic expectations and/or could not communicate their expectations in an appropriate manner. In addition; at different points in their career, players perceived themselves to be less competent than either team-mates and/or opponents whilst still wanting to be the best. The following passage from Anne-Marie encapsulates these issues:

"I'm the same in everything… I want to be the best and if I'm not the best then I just give up because I don't enjoy it. I don't really understand… and if I'm not [the best] then I don't see any point trying…So when you've got [youth international soccer player] barking at you for misplacing a pass in training, or … because you scored an own goal, you are going to doubt yourself; aren't you? "

Perceptions of football career opportunities and player-teacher interactions

There was a perceived lack of career opportunities in the UK. Lizzie articulated the lack of soccer career opportunities, particularly for young female soccer players, and how this impacted on her career transitions:

"[After starting College] When I wasn't in College or in lessons, I'd work…it wasn't that I didn't want to go; give me a choice of football or work and I'd pick football any day, but I didn't get paid [like male players of the same age and standard] and I needed the money…I understood when the coaches didn't pick me because I couldn't go to training."

As a result, players felt a sense of role ambiguity when questioned by significant social agents (e.g., teachers) why they might prioritise soccer. As players were unable to cite any tangible reasons other than enjoyment or social interaction, teachers would often go through an informal process of cognitive reframing that encouraged student-players to ascribe greater value to their 'student' role rather than their 'soccer player' role. Often this was achieved through emphasizing the importance of education for long-term career planning, economic stability and quality of life. As a result of these interactions, the role identity and value with the 'soccer player' was diminished as the role identity and value of

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'student' increased. For example, Jordana discussed an experience she had with her progress tutor at College which resulted in a wholesale alteration in her role values:

"I was in a disciplinary meeting with my progress tutor part way through my first year in College. He said to me that I was in danger of being kicked out because I was too far behind on my coursework and my grades weren't up to scratch. That for me was like 'time to make a decision'. He talked me through [asked] why I was missing so many deadlines and it was mainly because [of soccer training and matches]. When I explained this to him, he basically said that if I wanted to make anything of myself then football had to go. I spoke to my parents about it and they agreed that education was my priority so I quit football pretty much altogether."

Coaches were also asked their opinions about the potential opportunities for a sustainable career in female soccer. Michael provided a useful insight into his perception of career opportunities.

"The problem for our girls is where do they go when they leave us? For a lot of them there is nowhere to have a career. The good ones might get picked up by a FAWSL [Football Association Women's Super League] club if they're lucky, others will go get a scholarship in America. We're lucky we've had a few get to [youth international] so they'll probably have a playing career if they want, especially now how the FAWSL is going [progress of professionalization of the FAWSL]. Outside the FAWSL they can't make a living playing football. Trying to make a professional career as a coach is not much easier because of the culture in men's football..."

Theoretical proposals

Three key proposals are represented in the grounded theory of talent development and career transitions in female soccer (Fig. 5.2). Prior to these proposals and in keeping with recommendations for grounded theory research (e.g., Weed, 2009; Tamminen & Holt, 2010), we shall first outline the point of departure from previous literature. Previous soccer literature (e.g., study two; Holt & Dunn, 2004) indicates that soccer players usually enter a talent development programme because they have demonstrated signs of age-specific above average ability. Given the empirical support for this notion, we have accepted this as the starting point for a female soccer player's career transitions, and also cite this as our point of departure. The first proposal (Box 2; Fig.5.2) is that players, coaches, teachers and parents need to adaptively interact to produce an optimal talent development learning environment (TDLE). As a parallel process, optimal bi-directional interactions need to take place between players and siblings, and between players and peers both in soccer and out of soccer. Players,

coaches, teachers and parents require optimal interactions in order to lay the foundation for manageable, effective participation in a talent development programme for female soccer players. This is in order to facilitate access to a talent development programme and, thus, provide access to valuable resources for learning and psychosocial development as a soccer player. Soccer peers are noteworthy in the talent development environment for creating an effective motivational climate which challenges players at an appropriate level, with players of differing levels being important 'learning assets' for their team-mates. Non-football peers and siblings have an apparently significant role to play in helping talented female soccer players develop an enhanced level of social competence through appropriate levels of social motivation which determines their degree of sacrifice and discipline. Ubiquitous from all participants in our study was that, if one (or more) interaction (s) within the social environment becomes sub-optimal (e.g., breakdown in player and teacher relationship because of educational under-performance), the player level outcome will be a reduction in the likelihood that they will progress to an elite level in soccer, but may enhance their career development in other areas (e.g., progressing their education career).

The second key proposal (Boxes 3 and 4; Fig 5.2) is that the optimal multi-agential interactions cited above will result in a perceived need supportive talent development environment (STDE). We define a STDE as an environment where players perceive they have sufficient access to football specific advice and guidance; they will have opportunities to develop; will be faced with realistic expectations and functionally relevant challenges from their coaches, soccer-peers and teachers; they will have access to appropriate lifestyle management resources; and they will be able to develop strategies to manage role strain. The cumulative outcome of this supportive environment will be effective player-level role strain management. Through being in a STDE, players will have more chance to develop key intra-individual psychosocial assets (e.g., self-regulation), will experience enhanced psychological wellbeing, and will display more adaptive psycho-behavioural characteristics (e.g., training and rehabilitation adherence, volitional reflective behaviours, and lifestyle management).

The final proposal (Box 5; Fig 5.2) is that for talent development and successful career transitions to continue throughout a player's senior career, the factors cited above must continue to function in a cyclic nature where internal and external resources adapt to reflect the demands of the playing level.

Fig. 5.2 A Grounded theory of factors contributing to career/talent development and transitions in UK female soccer.

The diagram contains the following text elements:

Box 1
[Age-group specific] signs of above average ability that led to entry into player development centre

Box 2 — Optimal interaction of multiple social agents
- Player
- Coach
- Teacher
- Parent
- Siblings
- Soccer peers
- Non-soccer peers

Box 3 — Supportive football developmental context
- Football specific advice and guidance (including psychological skill development)
- Equal opportunities to develop
- Realistic expectations
- Lifestyle education
- Role strain management

Box 4 — Player level benefits
- Development of intra-individual constructs
  - Self-regulation
  - Social competence
- Enhanced psychological wellbeing
  - Basic psychological need satisfaction
- Optimal psycho-behavioural characteristics
  - Practice/training compliance
  - Match participation
  - Lifestyle choices

Box 5 — Greater chance of successful junior to senior [and subsequent intra-senior] career transitions

Discussion

The aim of this study was to produce a substantive grounded theory of talent development and career transitions in female soccer. A unique feature of this study was that we examined the dual career experiences of those who did not make it to the highest level of female soccer in the UK despite having experienced a female specific talent development pathway, thus enhancing understanding of a participant group who have previously been marginalised in career research (cf. Stambulova & Ryba, 2014). A further unique feature was the theoretical sampling of social agents currently under-represented in existing literature (e.g., teachers, non-sport peers) to assess the interactional role of these transitional variables (Stambulova 2003; 2009) on career development in UK-based female soccer players. In doing so, we have adopted a holistic perspective (Wylleman & Lavallee, 2004) on the developmental experiences of negative case female soccer players. Moreover, based on our findings, we have made proposals regarding the transitional outcomes (Stambulova, 2003; 2009) of female soccer players in the UK. The final unique feature of this study was that we moved away from the reported trend of post-positivist approaches in career transitions research (see Stambulova & Ryba, 2014) to a more interpretivist approach that has allowed us to produce a contextually sensitive substantive grounded theory of career transitions and talent development in UK female soccer.

Our player-level findings mirror those reported in contemporary career transitions literature (e.g., Pummell, Harwood, & Lavallee, 2008; Stambulova et al. 2014; Stambulova et al. 2012; Stambulova & Wylleman, 2014) in as much as players struggled to balance the demands of soccer, their academic studies and their private life. By also concurrently considering the perspectives of multiple social agents within a player's developmental trajectory alongside those of the player; we aim throughout this discussion to present a deeper understanding of how and why players may struggle to reconcile these roles. Throughout the discussion we elucidate considerations congruent with achieving positive developmental outcomes and close by offering applied implications which we feel will aid long-term talent development and dual-career transitions in female youth soccer. By discussing findings in this manner, we respond to research calls (e.g., Stambulova & Ryba, 2014) by demonstrating a greater understanding of what UK female youth soccer players' careers are, how they depend on the contexts the players belong to, and how we can help players to optimise their holistic career development.

Adolescent females have historically been demonstrated to have multidimensional self-identities (e.g., Goldberg & Chandler, 1991). These identities vary based on sport and

non-participation which presents the potential for role strain, which can lead to players struggling to manage multiple roles (e.g., O'Neill et al. 2013). Role strain is made up of role under load, role overload, role conflict and role ambiguity. The multi-agential relationships within a player's socio-contextual environment have the potential to create significant role strain as well as impacting on a soccer players' role identity and values. We suggest that these player-level difficulties may in part be due external pressures placed on other social agents. For example; a teacher's concern about a student failing – or not being a high achiever on an academic course – because soccer takes up time away from their studies was created by organisational demands placed on the teacher. This had a residual impact on the player because of the way teachers then interacted with players and their parents (e.g., suggesting that players give up soccer in favour of academic studies; encouraging parents to enforce withdrawal from soccer). This suggests that the interactions between players, teachers and parents became transition barriers (Stambulova, 2003; 2009) for players' soccer careers, but better aided their normative transitions in their education careers. Resultant from this, the expectations and behaviours of teachers and parents had shaped the players' values (Schwartz, 2006) away from soccer towards more socially appreciated roles (cf. Roccas & Sagiv, 2010); such as being an effective student who engages in optimal life planning (e.g. planning for higher education, planning their non-soccer career). When combined with the perception from players, coaches and teachers about the lack of opportunities for playing careers or professional careers (e.g., in coaching roles) upon finishing their playing careers (cf. McCormack &Walseth, 2013); these interactions with significant social agents resulted in soccer players becoming role under-loaded in their 'soccer player' role. These findings are consistent with recent dual career research (Stambulova et al. 2014) which highlighted that athletes who did not see their sport as a viable, economically stable career placed greater value on their educational studies.

As players became role *under-loaded* in their role of soccer player, this contributed to a role *overload* in their role as a 'normal' adolescent female. By being given permission to miss training and games, or facing no sanctions for missing these voluntarily, high-level players placed less value on leading a disciplined soccer lifestyle. This finding is stark given the widely held notion of lifestyle discipline being a determinant of talent development in soccer (e.g., Morley et al. 2014). As a result, players would focus more on enjoying a 'normal' mid-late adolescent teenage life of socialising with friends. This change in role emphasis, particularly in mid-late adolescence, created an increased sense of role *ambiguity* where players did not know which role they would value the most or which they should be

adopting. When non-soccer peers and siblings began to have more of an influence on the soccer players in our study, this would often result in role *conflict* as the soccer players were no longer clear about which role they would prefer to fulfil: Soccer player or 'normal' adolescent female (cf. Wylleman & Lavallee, 2004). When this occurred, they attempted to fulfil both roles, which typically resulted in sub-standard performances during training or games; and subsequently being dropped from the team. When this happened, players decided to de-select themselves from training and then from matches, initially asking more to play in reserve teams to avoid the competitive demand before withdrawing from soccer altogether.

Whilst existing literature (e.g., Wylleman & Lavallee, 2004) discusses how multiple transitions through adolescence, education and sporting careers can create difficult life situations for athletes, examination of existing soccer literature indicates that role-strain is not yet widely understood. Our findings are oppositely congruent with dual career research with elite athletes which reported that they were required to focus their areas in two areas of achievement whilst concomitantly balancing their academic, sporting and social roles (Bruner, Monroe-Chandler, & Spink, 2008). Therefore, to support the propositions within our grounded theory we contend that greater scholarly consideration of role strain in UK female soccer would make a noteworthy contribution to the literature.

In a performance environment, effective interaction between players, coaches and team-mates is central to the learning that can take place which, in turn, is central to the *development* aspect of talent development. Players appeared to demonstrate a decreased enactive mastery, typically born out of negative social comparisons, which then impacted on self-efficacy and intrinsic motivation. These negative social comparisons were initiated by; the player, their higher level team-mates, or the coach.

Coaches in this study demonstrated an "it is what they do with a ball that is important" attitude. We interpreted this coach philosophy as a contributing factor in the lifestyle choices displayed by players and impacting on basic psychological need satisfaction (e.g., Deci & Ryan, 2000). Supporting this element of the grounded theory, we suggest that by allowing the 'high performers' to miss training or games when coaches or players deemed it unnecessary for them to attend, a series of events occurred. The coaches were thwarting the players' psychological need for relatedness by indirectly encouraging them to remove themselves from the group, thwarting the need for autonomy by telling the players not to attend, and thwarting the need for competence by begetting a perception that players could not develop through training or games any more. Conversely, in the 'low performers', their need for relatedness appears thwarted by being distanced from significant members of the

group that could have been a learning asset or role model (i.e., the 'high performers'), their need for autonomy was thwarted by feeling they were not afforded the same freedom of choice and the perceived incongruent disciplinary sanctions that were placed on them should they miss training or games, and their need for competence was thwarted by the sense that they were not good enough to play with the 'high performers'. Essentially when players perceived themselves less 'soccer competent', their motivation for involvement decreased (cf. Quested et al., 2013).

Further negative social interactions occurred with soccer peers. These typically happened when players subjectively (e.g., I think they're better than me) or objectively (e.g., youth international player) recognised their peers as more competent. This appeared to result in players using behavioural disaffection (e.g., Curran et al. 2013) as a reactive avoidance coping strategy. Players consciously, markedly reduced efforts in training or competition to avoid selection against a difficult team as well as self-deselecting for competitive games because they did not want to be over-shadowed by their international team-mates. Players also reported feeling over-whelmed by higher level players that they played alongside for their player development centre, and were often pre-occupied with the ramifications of making performance related mistakes (e.g., Larsen et al. 2013).

Coach level data suggested that it was often difficult to fully integrate all players in training sessions due to organisational stressors (e.g., lack of resources) and the range of technical ability within a group. As mid-late adolescent players are still *learning* soccer through the development and into the mastery stage (Wylleman & Lavallee, 2004), and given the emphasis placed by coaches on the needs for technical and tactical skill development, we suggest the Challenge Point Framework (CPF; Guadagnoli & Lee, 2004) as a noteworthy consideration to counteract issues of low resources and a wide range of abilities.

The CPF offers that learning is intimately related to the information available to the learner and how the learner may interpret that information in a performance environment which – in turn – is linked to the functional difficulty of a task. Three key posits arise from this: (a) learning cannot occur in the absence of information from which one can learn; (b) learning will be reduced in the presence of too much or too little information; and (c) the optimal amount of information differs as a function of the technical ability of the learner and the difficulty if the task to be learned (Guadagnoli & Lee, 2004). We suggest that, in allowing high performers to miss training, coaches were removing a valuable learning resource for lower performers. As opposed to letting high performers have 'time off', coaches could have increased the degree of contextual interference for higher performers through increasing their

functional task difficulty (e.g. via tactical overload in a small-sided game). To support this aspect of the theoretical proposals, drawing on peer-learning literature from education settings that has demonstrated the role of peers in enhancing academic achievement and motivation (e.g., Eisenkopf, 2010) we argue this would have challenged higher performers further whilst also maintaining their presence as a learning resource from which lower performers could develop. Intuitively, we contend that enhancing this capacity to learn may also enhance both soccer and education success, given that recent literature found some student-athletes to be determined to pursue both their education and sport, explaining that both connect the athlete's sense of identity, purpose and well-being (O'Neill et al. 2013).

We are cognisant here of not attributing socio-contextual or environmental factors as sole reasons for female soccer players' unsuccessful attempts at junior to senior career transitions. Through their reported developmental behaviours (e.g. "nights out on the town" with peers on the night before training or games), players in this study appeared to lacked the necessary self-regulatory capacity to progress in female soccer (e.g., study two) that can differentiate between higher and lower ability players (e.g., Toering, Elferink-Gemser, Jordet, & Visscher, 2009). Players also appeared to lack a sense of soccer social competence. During mid-adolescence, girls demonstrate a marked increase in the importance of peers and social relationships and will have a tendency to seek close relationships with their peers (Visek, Harris & Blom, 2013). We suggest it is this tendency that meant players fell short of the required social competence (encompassing cognitive, affective and behavioural elements) required to make successful career transitions. This can be evidenced by players recognising that their lifestyles and social interactions were not those required of an elite level player, yet they did not apply that learning to make adaptive changes in social interactions (Semrud-Clikeman, 2007).

The impact of social competence on talent development on career transitions is not a new phenomenon and has previously been shown to be related to dropout from male youth soccer (e.g., Ommundsen & Valgum, 1991). However, little is known about how social competence can be developed in female soccer players to facilitate dual careers. Therefore, we suggest that a player education programme centered on the development of social competence may serve to increase the chance of successful junior to senior career transitions. We would however echo that those working with mid-adolescent female soccer players must remain mindful of the potential impact of the need for strong social relationships on the player (Visek et al. 2013) when considering such a programme.

Applied implications

Based on the propositions of the grounded theory, four prominent applied implications have emerged from this study. First; we have been mindful through this paper to avoid communicating a message that soccer is more important than education. However, we do suggest that the two should mutually co-exist from an early age in aspiring female soccer players. Existing literature suggests that consideration of dual career development can reduce dropout and aid junior to senior career transitions in sport (e.g., Larsen et al. 2013; Stambulova, Franck, & Weibull, 2012; Warriner & Lavallee, 2008). This is a particularly important consideration for female soccer players in the UK given that – even in the more professional structure offered by the FAWSL – there are currently few opportunities for soccer to provide the long-term economic stability that is afforded male players of an equivalent level, making the importance of a successful academic or vocational career a central consideration. As an example based on conjecture, many UK Higher Education Institutions offer athletic scholarships for female soccer players that have both academic and sporting representative requirements. At the same time, a player may also be contracted to a team in the UK FAWSL where their contract may stipulate that they cannot play competitively for any other team. This will likely cause a situation where a female player is required to forego either their academic or soccer career, thus threatening their dual career potential. This is different to other countries (e.g., the USA) where the dual careers of female soccer players are facilitated through the collegiate/university structure in such a manner that supports soccer and education equally (McCormack & Walseth, 2013), and can feed into elite sport settings. Therefore, commensurate with recommendations in the EU guidelines on Dual Careers of Athletes (European Commission, 2012), we suggest there is a need for collaborations between national governing bodies, player development centres and education providers that can facilitate the dual career development of female soccer players in the UK.

Second; role strain emerged as a central threat to career transitions in female soccer. We recommend the development of player education programmes or workshops that aid players in managing the impact of role strain, through effective role-strain management strategies. Moreover, given that part of the role strain was founded on the players' inability to make independent informed decisions that would benefit their soccer talent development trajectory, combined with the contention that reflective skills are a differentiating factor between elite and non-elite players (e.g., Toering et al, 2009); we also suggest the inclusion of reflective thinking skills training as part of player education workshops.

Third, educational programmes aimed at helping coaches, parents and teachers better understand dual careers in female youth soccer players would be a worthwhile future direction. We contend that these social agents have unintentionally collaboratively contributed to the players' crisis transitions (Stambulova, 2003) by fostering an environment whereby by the player has perceived a mismatch between their available resources and the demands of their within-career transition. This is particularly important for those working with talented female soccer players in the 14-18 age range as it appears this age range is where a player's multiple social identities demonstrate the greatest conflict. Further, we suggest that such education programmes adopt a family-systems approach whereby delivery is player-centred whilst also being coach, parent and teacher supported. This will allow players, coaches, parents and teachers to understand their interactions with each other, as well as understanding their interactions with their environment (e.g., Blom, Visek & Harris, 2013).

Finally, coach and player level data highlighted a lack of perceived competence on the part of coaches for player development beyond the technical and tactical level. Based on this and in-keeping with coaches' preferred sources of coach education (e.g., Erickson, Bruner, MacDonald, & Côté, 2008); we suggest that a collaborative, in-situ field-based learning, critical friend approach (cf. Cropley, Miles & Peel, 2012) where coaches work with other professionals (e.g., sport psychologists) and focussing specifically on the (counter) transference of coach education into coaching behaviours may be noteworthy. This collaborative working alliance approach (cf. de Haan, 2011) to reflective practice that embraces both reflection *in* action as well as reflective *on* action may be fruitful in enhancing research informed coaching practices.

Limitations

The first limitation of our study was the absence of parent data. Without this, we are dependent on the views of players about their individual player-parent dyads. In defence of this; during data collection players often appeared concerned about the impact on their relationships with their parents should the parents be invited to interview and topics such as players' adolescent lifestyles and social relationships be discussed, so we deemed it unethical to sample parents. A second potential limitation was the reliance on retrospective interviews. Retrospective interviews can be subject to recall error or bias (Patton, 2002) which may distort the veracity of findings. In order to minimise this concern, we triangulated data from players and the multiple social agents as well as adopting appropriate types of probe questions (e.g., clarification, elaboration) during interviews. Future research may seek to adopt more prospective approaches to research that incorporate behavioural observations in

order to further minimise the risk of recall error or bias. The final limitation is that the grounded theory makes proposals about the conditions of an optimal learning and talent development environment which, when met, offer a greater chance of effective within-career transitions in female soccer. However the key proposals of the theory have yet to be tested. As such, further applied research examining the application of this theory, overtly considering the experience of players who are currently successful within their soccer careers, is warranted.

Concluding remarks

To our knowledge this is the first study that has adopted a combined grounded theory and negative case analysis perspective to examine talent development and career transitions in female soccer. Our findings have reflected the voices of the female soccer players and other transitional variables in the form of multiple social agents. In doing so, we have helped to gain a culturally specific understanding of the nature of their lived experiences within UK female soccer. We have forwarded that recognition by peers, education providers, parents and siblings of the unique challenges that face UK-based female youth soccer players can help to enhance their dual career experiences. These transitional factors ultimately impact on a player's developmental choices and, thus, their chances of a successful transition from the development to mastery stage of their soccer career. We contend that a broader scale examination of players' perceptions of female specific soccer talent development environments that tests the predictions offered herein is warranted. Testing the predictions will serve to enhance our understanding of the challenges faced by adolescent female soccer players and may assist in scholarly understanding of factors affecting junior to senior career transitions and dual career experiences in female soccer, via assessing the predictive validity of the theory.

Chapter 6: Predicting career intentions in talented UK female football players

The foci of previous studies in this thesis were the developmental experiences of elite female youth and negative case soccer players in the UK. Study three culminated with a grounded theory of talent and career development in UK female football players. A critique of grounded theories in soccer research (e.g., Holt & Dunn, 2004; Holt & Mitchell, 2006) is that they have remained untested in subsequent studies. Study three noted that significant others within a talent development environment may affect key psychological attributes (such as basic psychological needs satisfaction) and may subsequently affect a player's career progression. As the predictions of the grounded theory in study three were not tested through study three, a quantitative analysis of key theoretical predictions within the scope of the Ph.D. formed the focal point of this final study.

In recent years, research examining talent development environments (TDEs) in football has increased significantly (e.g., Ivarsson, Stenling, Falby, Johnson, Borg, & Johansson, 2015; Larsen, Alfermann, Henriksen, & Christensen, 2013; Mills, Butt, Maynard, & Harwood, 2014a). When contextualising TDEs, Martindale, Collins and Daubney (2005) proffered that they have four key characteristics: (1) long-term aims and methods, (2) wide-ranging coherent support and messages, (3) emphasis on appropriate development rather than early selection, and (4) individualised and ongoing development. More recently, a successful TDE has been defined as one which manages to continually produce top-level athletes from their junior ranks, and provides them with the resources for coping and future transitions (Alfermann & Stambulova, 2007).

The importance of the TDE in football was recently reinforced by Ivarsson and colleagues (2015) who demonstrated that an environment perceived to be supportive with a long-term development focus associated positively with players' psychological wellbeing. Despite this, literature from elite football academies in the UK demonstrated that players perceived their TDEs as requiring improvement in areas relating to understanding the athlete and links to senior progression (e.g. Mills et al. 2014a). Whilst the body of literature in TDEs is expanding, the most recent research in football has drawn on predominantly (e.g., Ivarrson et al. 2015) or solely (e.g., Larsen et al. 2013; Mills et al. 2014a) male populations. Whilst adding valuable insight, it is unknown whether these findings are applicable in female football. This is an important consideration given the under-representation of female football players within existing research (see studies two and three) and the need for marginalised research populations to gain greater presence to provide a culturally and contextually specific evidence-base to inform practitioners' work (Stambulova & Ryba, 2014). In order to address

this, understanding the experiences and perceptions female youth soccer players within their TDEs is warranted.

The landscape of UK female youth football

The girls' talent pathway in England is a pyramid structure approach that is designed to help young female football players develop within appropriate TDEs. Within this pyramid, there are Football Association licensed Girl's Centres of Excellence (CoEs) which allow players opportunities to access levels of coaching and support, aimed at producing elite English female players to compete on the world stage (Football Association, 2012). The CoEs typically require girls to train twice per week on weeknight evenings and have fixtures once per week on a weekend, which presents challenges in and of themselves as this introduces dual-career development difficulties for some players from a young age (see study three). CoEs are multi-functional, but ultimately have the remit of developing players to a point where they can cope with the demands of Elite Performance Camps (EPCs) and ultimately age group and senior international football. A second function of the CoEs is to prepare players for an appropriate exit route after the U17 age group (the oldest age group within CoEs), with the typical desired route for CoE 'graduates' being one of the Football Association Women's Super League (FAWSL) teams (the highest level of Women's football in England).

Clearly, female football has experienced significant growth in England in recent years with scholarly interest in female player development manifesting a slight increase. However research considering psychosocial factors is scant and research examining the development of female football players still lags significantly behind the attention afforded to male players (e.g. study one). What is clear however, is that academics centering their work on the talent development of female football players (e.g., studies two and three) are ascribing to the longstanding notion that – for players to develop effectively – they need to be in an environment that is commensurate with their needs as players (Gagné, 2003; Williams & Reilly, 2000).

Given the relative infancy of female football in comparison to male football, it is perhaps unsurprising that the research attention is only recently gaining momentum. However, given the contention that the environment is central to talent development, it would be deleterious to progress should consideration not be given to gaining a clear understanding of female players' perceptions of their talent development environments. This understanding would allow the academic community to extend and enhance current practices within football, thus augmenting the developmental opportunities for female football players.

Current empirical understanding in UK female youth football

At present, the understanding of female players' perceptions of their developmental experiences in the UK is limited to studies two and three of this thesis. Study two underscored the importance of different elements of a female football player's holistic TDE and the impact that they can have on a developing player's career. For example, 'non-soccer friends' helped talented female football players to lead a disciplined lifestyle which facilitated their involvement in optimal practice and play behaviours, both in structured and unstructured football environments. Further, appropriate competition opportunities against male players served to provide challenges that female players perceived as important in developing pertinent performance characteristics (e.g., faster decision making skills, resilience), which benefitted them during times when they felt there was an insufficient level of competition available from their female playing counterparts.

Whilst this was based on longitudinal, prospective research that included fieldwork, informal meetings and semi-structured interviews with players, a potential limitation is the generalizability of findings being limited by the small and homogenous nature of the sample. Moreover, with the absence of data from other key social agents (e.g. parents or coaches) or players who had not successfully transitioned through the various stages of female youth football, it was not possible to challenge the assumptions drawn from elite female players.

To address these limitations study three produced a grounded theory of factors associated with talent/career development and transitions in UK female soccer players. Using a holistic approach that drew on the experiences of 'negative case' female football players and other key social agents, study three highlighted that a player's TDE can be central to unsuccessful attempts at navigating a football career. They predicted that, for female players to have successful careers in football, they must experience optimal multi-agential interactions (e.g., between players, parents, coaches, and team-mates) which would then form the basis of a talent development and learning environment. Within this, players would experience a supportive environment that elicited appropriate amounts of player-level challenge, provided equal opportunities for the long-term development of players and effectively managed the role strain created by female players multiple identities of self and their dual career demands (i.e. players would experience a higher quality talent development environment). Resultant from this, players would experience psychological wellbeing and basic psychological need satisfaction, the development of essential intra-individual assets (such as social competence), and display preferred psycho-behavioural characteristics (such as adaptive practice behaviours and appropriate lifestyle choices). It was also predicted that,

for a player's career to continue to progress, these experiences must continue in a cyclic fashion, amending as necessary as the demands of the playing level changed.

Whilst this was the first study of its type to consider negative case female football players alongside significant social agents (e.g. friends, teacher, coaches), data was largely gleaned via retrospective methods, introducing the potential for recall error or bias. The contributions aside, research with UK female youth football players in-situ may provide information about perceptions of TDEs that has greater primacy. Moreover, whilst the negative case analysis approach demonstrated the use of an otherwise under-utilised research methodology that can serve to extend and challenge thoughts on a given topic (Holt & Mitchell, 2006), the predictions of the grounded theory are untested in 'positive' case populations. As such, research that tests specific elements of the grounded theory using positive cases of talented female football players may add to the veracity of the theoretical predictions (e.g., the relationships between the perceptions of TDEs and basic psychological need satisfaction) concomitantly extending research understanding of female football players' career intentions, beliefs and aspirations in the process.

Factors affecting career continuation

Ubiquitous amongst all participants in studies two and three was the notion that the quality of social environments fostered by significant others holds implications (both adaptive and maladaptive) for the ensuing intra-individual player level psychosocial responses. In-turn, this has implications for adaptive football behavioural engagement (e.g., Curran, Hill, & Niemiec, 2013) and – potentially – the aspirations, beliefs and intentions of making successful normative career transitions toward a senior elite level.

Understanding the factors that can affect career intentions, beliefs and aspirations is a viable alternative to longitudinal tracking of players' career development from a lifespan perspective as they are three factors that can affect sport continuation (Gucciardi & Jackson, 2015). For example, the Theory of Planned Behaviour (Ajzen, 1991) contends that having a higher level of intention is the strongest and most immediate determinant of behaviours. Moreover, perceived behavioural control – broadly congruent with the combination of perceived autonomy and perceived competence – is posited to strengthen these intentions. As such, understanding how perceptions of the TDE and perceptions of basic psychological need satisfaction interact in female football players will give an indication of football career continuation. In turn, football career continuation is an indicator of adaptive behavioural engagement, which is one of the central tenets of talent and career development in female football (see study three). Therefore, understanding extent of this phenomena further in

broader UK female football populations who are currently active participants within the UK talent pathway will likely facilitate practitioners seeking to develop talented female football players in the UK.

Syncretic with the study of talent development and career transitions in female football is that of factors affecting dropout. In its most basic sense, participation in football is the foundation of talent development and career transitions. Therefore, consideration of factors affecting dropout in female football is warranted. Whilst no wide-spread studies solely examining the concept of dropout in talented female football players in the UK exist, Quested et al. (2013) did produce an expansive examination of intentions to dropout from football across five countries that was grounded in Basic Needs Theory (Deci & Ryan, 1985). Their results pointed to the important role of basic need satisfaction and sport enjoyment reducing the likelihood of youth football players wanting to drop out of football. Notably, they reported that 47% of variance in basic need satisfaction from 7769 football players was from perceptions of autonomy supportive coaching. However, given the significant gender imbalance in the study (6641 males vs. 1020 females) and with a lack of reporting of gender specific findings, it is not possible to isolate the results of female football players.

In a UK-based study of male and female youth football players, Curran et al. (2013) further supported the role of the coach in enhancing basic psychological need satisfaction. Consistent with the work of Quested et al. (2013), they highlighted that behavioural engagement through basic psychological need satisfaction was mediated by autonomy supportive coaching that also provided appropriate levels of structure, and that behavioural disaffection was negatively associated with autonomy supportive coaching. Three key considerations arise from this work. First, players in these studies were neither talented nor elite youth players. As such, the nuances of a TDE programme sub-culture (e.g. a greater emphasis on the requirement for winning as players progress) may elicit different perspectives of the coach. Second, both the work of Quested and colleagues and Curran and colleagues drew heavily on non-sport specific measures in data collection. As such; the use of a validated, sport-specific measures will likely provide more ecologically valid findings. Finally, the data collection measures used did not allow for the assessment of the involvement of the coach (i.e. the coach's interest or concern for players away from the football domain). Given that involvement is an important part of the coach-player relationship (Mageau & Vallerand, 2003) which in-turn may affect a player's perception of their TDE, a noteworthy direction would be to ensure that any sport-specific measures used are sensitive to players' perceptions of coach (and other social agents') involvement.

Whilst the evidence supporting the role of the coach in football as a key social agent in football is irrefutable – often central to whether a player will progress in their career transitions (e.g., Cushion, Ford, & Williams, 2012) – they are just one of a myriad of social agents. Peers (e.g., Ullrich-French & Smith, 2009), parents (e.g., study two) and teachers (e.g., study three) can all also impact on career transitions, often via the motivational climate they create (e.g., Keegan & Harwood, 2014). Despite this, perceptions of their role within the TDE is less understood. Therefore, adopting a measure that examines female football players' perceptions of the roles of a wide range of significant others within TDEs is a noteworthy consideration for the area.

Summary rationale, aims, and hypotheses

In sum, the available literature that has focussed on the developmental experiences of talented female football players in the UK has been small scale in nature and consisted of relatively homogenous samples. Where greater numbers of female participants have been investigated, they have typically been subsumed to a degree where research findings are difficult to isolate to female populations from the UK. Finally, contemporary literature that has directly examined UK TDEs has been drawn solely from elite male academies (e.g. Mills et al. 2014a; 2014b; Morley, Morgan, McKenna & Nicholls, 2014). Resultant from this, we aim to investigate UK-based talented female football players' perceptions of their talent development environments with a view to making practical recommendations that can facilitate career transitions, through enhancing career intentions, aspirations and beliefs. In order to achieve this, the key objectives were to test the predictions the grounded theory produced in study three by examining the relationship between perceptions of talent development environments, basic psychological need satisfaction, and career aspirations, beliefs, and intentions.

The first objective of the study was to gain an insight into UK female football players' perceptions of their talent development environments. This would allow us to provide meaningful recommendations about strengths and areas for improvements that are contextually and culturally specific, thus benefitting the applied work of practitioners within these environments (Stambulova & Ryba, 2014).

Based on findings from studies two and three, we were also interested in exploring the impact of age and playing level on career intentions, beliefs and aspirations. Drawing on findings from those chapters, we tentatively hypothesized that: Age will negatively predict career intentions, beliefs and aspirations; and that playing levels will positively predict career intentions, beliefs and aspirations.

Based on study three, the third objective of the study was underscored by three sets of hypotheses (see figure 6.1): (1) relating to the degree to which perceptions of different elements of the TDE (Long-term development focus, quality preparation, long-term development fundamentals, communications, understanding the athlete, support network and challenging and supportive environment) would predict basic psychological need satisfaction (competence, autonomy and relatedness); (2) the degree to which basic psychological need satisfaction would predict career beliefs and aspirations in talented UK female soccer players; and (3) the degree to which their career beliefs and aspirations would predict career intentions. By way of example of the process of hypothesis generation, the findings from study three highlighted that a female football player's perception of the type and level of support offered played a role in the degree to which they identified with the team and as a team member, and the degree to which they understood and appreciated their role within the team. In turn this affected the player's aspirations to pursue a career in football or whether to engage in different types of social behaviours and career pursuits. This led us to generate the hypothesis as part of the path model that: perceptions of support network > relatedness > aspirations > intentions.

Method

Procedure

Following ethical approval from a UK Higher Education Institution, every Football Association Licensed Girl's Centre of Excellence (CoE) and Football Association Women's Super League (FAWSL) club was contacted via e-mail. This equated to 47 organisations being contacted through initial enquiries. For CoEs, the named centre manager and technical director were contacted as we deemed it likely that any decision to take part in the study would be a joint decision. For the FAWSL, the contact form on the club website was completed. The purpose of this first process was to gain gate keeper consent. At this first stage, the offer to participate was refused for the following reasons: insufficient time to administer (n=2); insufficient players of an appropriate age (n=1); too many requests of this nature to facilitate the study (n=2); already part of a pilot project (n=1); players already taking part in other research and do not want to impose too many demands on them (n=1); not wanting to set a precedent by facilitating one study that would lead to multiple requests that would have to be facilitated (n=1); and having an exclusivity agreement with another UK institution meaning that players are only allowed to take part in research with that institution (n=1).

In total, eight CoEs from the north, midlands, and southern England and six teams from the FAWSL with a similar geographical dispersion agreed to take part. Collectively, they provided a total potential research population of 316 talented female football players, of which 137 participated in the survey (43.4% response rate). Of these, eight players did not fully complete the survey. In keeping with Tabachnick and Fidell's (2007) recommendations, these were removed as their item nonresponse exceeded 5%. This left a total of 129 participants (40.8% response rate). Minimal accepted sample size was determined using Altman's (1980) nomogram for estimating sample size. The statistical power was pre-set at 0.8 and the alpha level of significance was set at 0.05 in order to ensure acceptable inference (Zhong, 2009). As a result, a minimum of 120 participants were required for the study.

Of the teams who agreed to participate, two teams asked the author to collect the data face-to-face as opposed to via the online survey. This was so that players and parents could ask any questions about the study in a face-to-face setting, as opposed to via e-mail. As the first author is in possession of a full Disclosure and Barring Services certificate and would be chaperoned by the nominated welfare representative at all times, following further institutional approval, this request was granted.

Due to the anonymous nature and online survey-based nature of the data collection, passive parental consent was gained. Consistent with ethical approval conditions and the safeguarding procedures for players under the age of 18, the online survey was distributed to the nominated individual responsible for player welfare (usually the centre manager) who was asked to distribute the survey to parents, who would then forward the survey onto their children. Active assent was gained from players via questions at the start of the survey that followed the survey introduction and a question at the end of the survey that stated having answered all of the questions, players still consented for their data to be used. For participants over the age of 18, the active consent procedures mirrored the assent procedures for players under 18.

Inclusion criteria and participants

Talented female football players aged 13 – 21 years old and registered with either CoEs or FAWSL clubs were sampled (M age = 16.06, SD = 1.90). The age range started at 13 as female football literature has highlighted this is approximately the age at which female players will start to think about having a career in female football, or when they may start engaging in behaviours that can reduce their chances of having a successful senior football career (refer to studies two and three). It is also the age at which players become eligible for U15 age group football, the youngest international age group team. The age range ended at

21 as this is where development squad participation generally tends to cease and players typically will have made their first-team FAWSL debuts or will have represented an international age group. As such, players at this age will generally have made decisions about their football careers. Eighty-one players (62.8%) were CoE players, 35 (27.1%) were FAWSL development squad players, five (3.9%) were age-group international players and eight (6.2%) were FAWSL first-team players.

Measures

Talent Development Environment Questionnaire. In recent years, the Talent Development Environment Questionnaire (TDEQ; Martindale, Collins, Wang, McNeill, Lee, Sproule et al. 2010) has emerged as an ecologically valid (see Martindale, Collins, Douglas & White, 2013) measure of perceptions of TDEs. The TDEQ has a seven-factor structure: (1) long-term development focus (24 items), (2) quality preparation (5 items), (3) communication (7 items), (4) understanding the athlete (4 items), (5) support network (8 items), (6) challenging and supportive environment (4 items), and (7) long-term development fundamentals (7 items). Statements associated with each subscale can be found in table 5.1 and are measured on a 6-point likert scale ranging from 1 (strongly agree) to 6 (strongly disagree). Recently, Martindale et al. (2013) highlighted how the TDEQ can differentiate between higher and lower quality TDEs and the TDEQ has been used to examine perceptions of TDEs within football settings in the UK (Mills et al. 2014a) and Sweden (Ivarsson et al. 2015). One consistent concern with the use of TDEQ is that the challenging and supportive environment subscale consistently reports low reliability (e.g. Ivarsson et al. 2015; Mills et al. 2014a; Wang, Sproule, McNeill, Martindale, & Lee, 2011), however all other subscales consistently report adequate to excellent reliability. Owing to the psychometric properties of TDEQ (see Martindale et al. 2013) and its successful use within football (e.g., Ivarsson et al. 2015; Mills et al. 2014b), the TDEQ is a measure that can be used within developmental contexts.

Basic Needs Satisfaction in Sports Scale. In order to improve the level of understanding of the antecedents and consequences of basic needs satisfaction in a sport context, it is important to use a domain specific measure (Ng, Lonsdale & Hodge, 2011). The Basic Needs Satisfaction in Sports Scale (BNSSS) is a 20 item sport specific measure of the satisfaction of competence (5 items), autonomy (total 10 items; choice = 4 items, internal perceived locus of causality – 3 items, volition = 3 items) and relatedness (5 items). Items are measured on a 7-point likert scale ranging from 1 (not true at all) to 7 (very true). The measure was designed specifically with competitive athletes and has evidence of good

internal consistency reliability, with alpha coefficients ranging from .61 - .85 (Ng et al., 2011).

Career aspirations, beliefs, and intentions. Career aspirations, beliefs and intentions were measured by a series of seven bespoke statements designed specifically for this study, anchored by 1 (complete aspiration / belief / intention) and 6 (no aspiration / belief / intention). These statements measured aspirations and beliefs of playing at different levels of female football and overall career intentions (e.g. I aspire to have a career as a senior international women's soccer player).

The use of a single item measures in research is a matter of longstanding debate (e.g., Gardner, Cummings, Dunham, & Pierce, 1998; Petrescu, 2013). Whilst single items lack detail, they do have the benefit of simplicity (Bowling, 2005). This was an important consideration given that our participants were aged as low as 13 years old. Research (e.g., Bergkvist & Rossiter, 2007; Gardner et al. 1998) contends that single-item measures are equally as valid (both in discriminant and predictive contexts) as multiple-item measures, proffering that theoretical tests and empirical findings would be equal if single-item measures were used in place of multiple-item measures. Moreover, single item measures can be used alongside multi-dimensional measures, and are useful as broad summary ratings of diverse aspects of life (Bowling, 2005). In addition, there are contentions that global single item measures are more appropriate for the measurement of outcome variables (Fayers & Hand, 2002) because multi-item measures may confound the dimensionality of these concepts with the multiplicity of their causal sources. Therefore, in order that predictor variables can be separated, such global outcome variables need to be considered as unidimensional, but with multiple potential causes. The single-item indicator is then logically the outcome variable in analyses (e.g., career intentions) and the predictor variables include the range of pertinent multi-dimensional scale variables (i.e., those represented by the TDEQ and BNSSS). Finally, in the context of this study, single-item subscales can be used to measure constructs that are simple to understand in the context that they are used (Hair et al. 2009; Petrescu, 2013). This was an important consideration given the need for simplicity and specificity in question design for young people when conducting surveys (Heath, Brooks, Cleaver, & Ireland, 2009)

Data analysis: Objective 1

The TDEQ responses are structured on a six-point scale ranging from 1 (strongly agree) to 6 (strongly disagree), hence a lower score equates to a higher level of agreement. Consistent with recent approaches to the use of the TDEQ and for ease of interpretation (e.g.,

Mills et al. 2014; Wang et al. 2011), items were reverse scored so that a higher score led to a more positive perception.

To assess internal consistency reliability, we calculated Cronbach's alpha for each of the subscales of the TDEQ and BNSSS. All bar one of the TDEQ subscales had good to excellent alpha coefficients, ranging from .748 to .932 (see table 6.2). One subscale – challenging and supportive environment – had a low internal reliability (.378) so was removed from the study (cf. Ivarsson et al. 2015; Mills et al. 2014; Wang et al. 2011). All BNSSS subscales demonstrated good to excellent alpha coefficients (.622 - .833, see table 5.2).

In line with Martindale et al's (2013) recommendations for using the TDEQ in applied research, we next calculated mean and standard deviations for each of the items and for each subscale (see tables 6.1 and 6.2). This process did not include the miscellaneous items that are included in the TDEQ. In order to isolate key strengths and areas for improvement in female football TDEs, quartiles were used whereby the top 25% of items were taken as key strengths and the bottom 25% as key areas for improvement.

Data analysis: Objective 2

We used linear regressions to explore the relationships between age and career aspirations, beliefs and intentions; and playing level, career aspirations, beliefs and intentions. Prior to conducting the regression analysis, the assumptions were assessed. First, the ratio of participants exceeded the ideal ratio of 20:1. Next, collinearity and multi-collinearity were investigated. This assumption was met as (a) the predictor variables with the exception of autonomy and relatedness were not highly correlated (R≤0.9; Hair, Black, Babin, Anderson, & Tatham, 2006) and (b) collinearity diagnostics demonstrated that each predictor variable was highly loaded on one dimension, but not others; and each predictor variable was highly loaded on a different dimension. Next, the Durbin-Watson (Durbin & Watson, 1951) statistic (1.804) demonstrated that the residuals were independent as the value was >1 but <3 (Field, 2014). Next the Mahalanobis distance (Mahalanobis, 1936) was used to examine how much the values of a case differed in predictor variables from all other cases, to examine the degree to which an individual case may affect the overall model. We set the Mahalanobis distance critical thresholds at 14.22 using Barnett and Lewis' (1978) critical values for outliers. We selected these over more recent critical values (e.g., Field, 2014) as the Barnett and Lewis method considers the degrees of freedom and number of cases as opposed to degrees of freedom alone. Cook's distances (Cook & Weisberg, 1982) were also examined to determine any individual cases that may influence the model. All Cook's

distances were below the critical threshold of 1, so met this assumption. Leverage statistics were examined to determine the influence of the outcome variable on the predictor variables. We calculated the Leverage statistic using Stevens (2002) formula (3(k+1)/n) which resulted in a cut-off value of 0.07. Finally, the histogram and normal p-p plot of regression standardised residuals indicated a normal distribution and linear relationship between residuals and outcome variables, respectively. These indicate that the assumption of homoscedasticity has been met. Six cases violated the assumptions of Mahalanobis distance and Leverage statistics, so were removed from the data set. This left a total sample of 123 participants for the regression analysis.

Data analysis: objective 3

Preliminary analysis. We used SPSS AMOS version 22 to analyse data. Initially, we conducted Confirmatory Factor Analyses (CFA) of the TDEQ and BNSSS using the robust maximum likelihood method to examine the factorial structure of the subscales. A Comparative Fit Index (CFI) of .90 (although .95 is preferred), a standardized-root-mean-square residual (SRMR) <.08, and a root-mean-square error of approximation (RMSEA) of <.06 were indicative of a good fit (Bentler, 1992; Hu & Bentler, 1998; Kline, 2010). Both the TDEQ (CFI = .606; SRMR = .089; RMSEA = .093) and BNSSS (CFI = .744; SRMR = .108; RMSEA = .096) demonstrated poor fit. Whilst model respecification is a viable option in instances where there is poor model fit (e.g., Ivarsson et al., 2015; Stebbings et al., 2011), this process did not produce an adequate model fit without violating the assumption of a minimum of three items per subscale (Bentler & Chou, 1987).

Primary analysis. Owing to the sample size, poor factorial validity of the TDEQ and BNSSS, and the high bivariate correlations (>.70; Tabachnick & Fidell, 2007) demonstrated between key TDEQ subscales and BNSSS subscales (see table 5.3), we were unable to test the original hypothesized model (see figure 6.1). Resultant from this, we parcelled the observed variables (cf. Bruner & Taylor, 2012). The revised path model based on this process was: Perceptions of TDE > basic psychological need satisfaction > career aspirations and beliefs > career intentions. As we aimed to examine the nature of the relationships between the set of targeted constructs as opposed to the primary aim being to understand the structure of the questionnaires, parcelling was an appropriate technique to adopt (Little, Cunnigham, Shahar & Widaman, 2002). In doing so, we ensured an acceptable participants to parameter ratio (cf. Taylor & Bruner, 2012) and allowed for a more pragmatic approach which negated the effects of poor factorial validity whilst concurrently allowing us to present practically meaningful findings (Hau & Marsh, 2004; Little et al., 2002).

To enhance confidence in our results, we used bootstrapping methods to obtain a sampling distribution for each parameter. Bootstrapping is a technique that can be used to enhance the model when sample size is insufficient (Byrne, 2001). We based this on 1000 sample replications with a bias corrected confidence interval (BC) of 95%, as the BC method outperforms other bootstrapping techniques (Cheung & Lau, 2008).

As Chi-square (χ^2) values can be too heavily influenced by sample size, we instead utilised χ^2/df values to assess model fit (Kline, 2010). Values ranging from 2-5 are deemed an acceptable fit (Bollen, 1989; Kline, 2010). As we had a relatively small sample size (N<150), we elected to use the lower end of the scale (cf. Sivo, Fan, Witton, & Willse, 2006).

In addition to null-hypothesis significance testing (NHST), we examined effect size to provide practical recommendations for the audience (Preacher & Kelly, 2011; Winter, Abt & Nevill, 2014). Typically, regression coefficients of 0.5, 0.3, and 0.1 indicate a large, moderate, and small effect respectively (Kline, 2010).

Figure 6.1 Original hypothesized model of factors affecting career intentions

Table 6.3.

Multicollinearity indices for the original hypothesized model

	LTDFo	QP	Comms	UtA	SN	LTDFu	Competence	Autonomy	Relatedness
Long-term development focus	1.000								
Quality preparation	.526*	1.000							
Communication	.745*	.456*	1.000	.547*					
Understanding the athlete	.559*	.527*	.547*	1.000					
Support network	.694*	.567*	.733*	.418*	1.000				
Long-term development fundamentals	.758*	.481*	.797*	.492*	.744*	1.000			
Competence	.448*	.371*	.367*	.208***	.383*	.363*	1.000		
Autonomy	.681*	.470*	.496*	.403*	.535*	.581*	.455*	1.000	
Relatedness	.699*	.474*	.551*	.441*	.515*	.588*	.459*	.915*	1.000

$*p = <.001, **p = <.005, ***p = <.05$

Results: objective 1

The results are organised into two sections. First, we present a descriptive analysis of the TDEQ and subscales in line with recommendations for using the TDEQ in applied research (e.g., Martindale et al., 2010) and consistent with recent approaches to TDEQ use within football (e.g., Mills et al., 2014). We used the item means and standard deviations with quartiles to demonstrate item level strengths and areas for improvement, so as to provide a greater depth of appreciation of TDEs. Second, given the emergent results, we employed an inductive content analysis to organise the areas for improvement under themes so as to form meaningful applied implications.

Perceptions of TDEs: subscale analysis

Female football TDEs in the UK were perceived to have strengths in long-term development focus and support network (see table 6.1). Pertinently, no subscale scored less than 3/6 which highlights that there was greater than 50% positive perception on all subscales. Relative to other factors, areas for improvement were communication and understanding the athlete. The factors of quality preparation and long-term development fundamentals were slightly above the pre-set threshold of 4/6 to indicate strengths (4.074 and 4.034 respectively).

Perceptions of TDEs: item-level analysis

The quartile analysis meant the highest and lowest scoring 15 items were highlighted as strengths (+) and areas for improvement (-), respectively (see table 6.1). Of note, 14 of the 15 upper quartile statements came from the long-term development focus subscale and one came from the support network subscale. The lower quartile was expanded to 17 items as three items were tied for 15th place with each having scored 4/6. It contained at least one item from each of the seven TDEQ subscales, although six of these items did come from the seven-item communication subscale. A content analysis of these areas for improvement resulted in these item statements being grouped under three higher order themes: (1) Planning for football-specific development and career progression; (2) communication with key social agents; and (3) holistic player development and wellbeing. As 14 of the 15 upper quartile statements came from the same subscale, a content analysis was not conducted; rather, we highlight simply that long-term development focus was perceived as a key strength of UK female football TDEs.

Planning for football-specific development and career progression

This higher order theme was constructed from players' perceptions that the planning for football-specific development and the consideration of factors that can affect a female

football player's career progression required improvement. It contained three lower themes: (1) Goal setting and feedback; (2) Interactions with senior or more experienced players; and (3) Developmental challenges.

Goal setting and feedback. This lower order theme contained four raw data elements[5]. It is based on the premise that players communicated that TDEs [6]needed to improve in goal setting, feedback being linked to specific goals, and in the regularity of progress and performance reviewing. In addition, TDEs require improvement when discussing requirements for career progression.

Interactions with senior or more experienced players. This lower order theme contained three raw data elements. It indicated that players indicated greater access to senior or more experienced players was desired, that players may like more opportunity to discuss how world-class performers succeeded in their careers, and that they would like more opportunities for help from more experienced players.

Developmental challenges. This lower order theme contained three raw data elements. It indicates that players felt their TDEs needed to improve in developing contingency planning skills, identifying upcoming challenges, and highlighted the sense that developing players can be written off before they have had the opportunity to fulfil their potential.

Communication with key social agents

This higher order theme is concerned with female players' perceptions that their TDEs could improve in their communication with key social agents. It is composed of two lower order themes: (1) communication regarding achievements, and (2) communications regarding demands.

Communication regarding achievements. This lower order theme contains two raw data elements: (1) Parents, and (2) wider support networks. These highlight that players felt TDEs could improve in communicating with parents and the wider support network about what players are trying to achieve in football.

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[5] Within the content analysis, TDEQ subscale items were viewed as raw data elements

[6] Areas for improvement relative to other aspects of the TDEQ

Table 6.1

TDEQ Item level analysis

	M	SD
Factor 1: Long-term developmental focus		
My coaches care more about helping me to become a professional/top level performance, than they do about having a winning team/performer right now	4.25	1.32
I am being trained to be ready for just about anything in soccer and life	4.59	1.10
If I got injured, I believe that I would continue to receive a good standard of support	5.04	1.04
Me and my team-mates are told how we can help each other develop further in soccer	4.67	1.04
My coach is good at helping me to understand my strengths and weaknesses in soccer	4.88	1.17
My coach is good at helping me to understand what I am doing and why I am doing it	4.80	1.13
My coach constantly reminds me of what he/she expects of me	4.88	0.95
The more experienced I get, the more my coach encourages me to take responsibility for my own development and learning	4.79	1.10
My development plan incorporates a variety of physical preparation such as fitness, flexibility, agility, co-ordination, balance, strength training etc.	5.11	0.94
If it didn't work out for me here, there are other good opportunities that would help me keep progressing in soccer	4.58	1.06
My coaches and those who support me give me straight answers to my questions	4.63	1.06
Developing performers are often written off before they have had a chance to show their real potential (-)	3.02	1.19
My training sessions are normally beneficial and challenging	4.88	1.06
Organisation is a high priority for those who develop my training programme	4.69	0.98
My coach plans training to incorporate a wide variety of useful skills and attributes, for example techniques, physical attributes, tactical skills, mental skills, decision making	4.97	0.98
I am constantly reminded that my personal dedication and desire to be successful will be the key to how good a performer I become	5.05	1.02
My coach emphasizes the need for constant work on fundamental and basic skills	4.76	1.10
There are people who help me or teach me how to deal positively with any nerves or worries that I may experience (e.g. coaches, parents, psychologists)	4.57	1.24
My coach is a strong supportive influence on me	4.74	1.18
My training is specifically designed to help me develop in the long-term	4.87	0.98
I spend most of my time developing skills and attributes that my coach tells me I will need if I am to compete successfully at a top/professional level	4.50	1.09
I struggle to get good quality competition experiences at a level that I require	4.85	1.03
I am encouraged to keep perspective by balancing any frustration that I may have in one area by thinking about good progress in another area	4.43	0.88
My coach emphasizes that what I do in training and competition is far more important than winning	4.32	1.42
Factor 2: Quality preparation		
I am rarely encouraged to plan for how I would deal with things that might go wrong (-)	3.61	1.33
I struggle to get good quality competition experiences at a level that I require	4.40	1.38
The guidelines in soccer regarding what I need to do to progress are not very clear	4.08	1.36
I am not taught that much about how to balance training, competing and recovery	4.18	1.42
I feel pressure from my mates in soccer to do things differently from what my coaches are asking me to do	4.28	1.45
Factor 3: Communications		
My coach and I talk about what current and/or past world class performers did to be successful (-)	3.60	1.38
My coach and I regularly talk about things that I need to do to progress to the top level in soccer (-)	4.00	1.27
My coach and I often try to identify what my next big test will be before it happens (-)	3.54	1.26
Feedback I get from my coaches almost always directly relates to my goals (-)	4.00	1.27
I regularly set goals with my coach that are specific to my development (-)	3.64	1.31
My coach often talks to me about the connections/overlap between different aspects of my training (-)	3.88	1.16
My coach explains how my training and competition programme work together to help me develop	4.19	1.21
Factor 4: Understanding the athlete		
My coach doesn't seem to be that interested in my life outside soccer (-)	3.90	1.42
I don't get much help to develop my mental toughness in sport effectively (-)	3.75	1.59
My coach rarely takes time to talk to other coaches who work with me	4.16	1.35
My coach rarely talks to me about my wellbeing (-)	3.89	1.29
Factor 5: Support network		
All the different aspects of my development are organised into a realistic timetable for me	4.20	1.19
I can pop to see my coach or other support staff whenever I need to	4.35	1.37
Those who help me in soccer seem to be on the same wavelength as each other when it comes to what is best for me	4.53	1.15
My training programmes are developed specifically to meet my needs	4.16	1.30
Currently I have access to a variety of types of professionals to help my development as a soccer player	4.46	1.43
My coach ensures that my school/college/university understands about my training/competition (-)	3.59	1.40
My coaches talk regularly to other people who support me in soccer about what I am trying to achieve (-)	3.89	1.29
My coaches and other who support me in soccer are approachable	4.92	1.00
Factor 6: Challenging and supportive environment		
My school/college/university doesn't really support me when it comes to my soccer	4.29	1.46
I don't often get any help from more experienced soccer players (-)	3.93	1.47
I have the opportunity to train with performers who are at a level that I aspire to	4.16	1.42
I am regularly told that winning and losing just now does not indicate how successful I will be in the future	4.24	1.28
Factor 7: Long-term development fundamentals		
The advice my parents gives me fits in with the advice that I get from my coaches	4.20	1.25
I am involved in most decisions about my soccer development	4.41	1.20
My coaches take time to talk to my parents about me and what I am trying to achieve (-)	3.59	1.46
I am encouraged to participate in other sports/cross-train	4.13	1.30
I would be given good opportunities even if I experienced a dip in performance	4.11	1.08
I often have the opportunity to talk about how more experienced performers have handled the challenges that I face (-)	3.85	1.33
My progress and personal performance is reviewed regularly on an individual basis (-)	4.00	1.32

Table 6.2

TDEQ and BNSSS subscale analysis

TDEQ subscale	Number of items	Item mean	SD	Cronbach's Alpha
Long-term development focus	24	4.665	1.166	.932
Quality preparation	5	4.074	1.436	.748
Understanding the athlete	4	3.859	1.444	.786
Communication	7	3.853	1.129	.893
Support network	8	4.249	1.341	.850
Long term development fundamentals	7	4.034	1.312	.797
Challenging and supportive environment	4	4.159	1.429	.378
BNSSS subscale				
Competence	5	5.684	1.053	.833
Autonomy	10	5.865	1.238	.791
Relatedness	5	5.911	1.033	.622

Communication regarding demands. This lower order theme contains one raw data element: (1) education. It highlights that players felt there could be greater or more effective communication with their education provider (e.g., school, college or university) about the demands they face in football.

Holistic player development and wellbeing

This higher order theme is concerned with areas for improvement in understanding the player outside of football contexts and in their more holistic, integrated development as a football player. It contains two lower order themes: (1) holistic considerations and, (2) psychosocial development.

Holistic considerations. This lower order theme contains two raw data elements: (1) life outside football and (2) player wellbeing. It denotes that players felt coaches could show more interest and concern with their life outside of football or with their overall wellbeing.

Psychosocial development. This lower order theme contains two raw data elements: (1) Understanding connections and (2) Mental toughness. It underscores that players felt TDEs could improve in helping players to understand the connections and the overlap between the different forms of training that they take part in and that players felt TDEs needed to do more to help them develop their mental toughness.

Results: objective 2

Objective two hypothesized that as players age increased, their careers aspirations, intentions and beliefs would decrease; but also that as playing level increased, so would career aspirations, beliefs and intentions. Results of the regression analyses supported both hypotheses.

Career intentions. Age and playing level accounted for 7.7% of variance in career intentions (Adj.R^2 = .077, F (2,120) = 6.102, p = .003). Age negatively predicted career intentions (β = -.440, p = .001, 95% CI -.532 - -.147). Playing level positively predicted career intentions (β = .324, p = .011, 95% CI = .170 – 1.312).

Career beliefs. Age and playing level accounted for 6.2% of variance in career beliefs (Adj.R^2 = .062, F(2,120) = 6.657, p = .008). Age negatively predicted career beliefs (β = - .402, p = .002, 95% CI = - .400 - -.092). Playing level positively predicted career beliefs (β = .316, p = .014, 95% CI = .117 – 1.030).

Career aspirations. Age and playing level predicted 7.7% of variance in career aspirations (Adj.R^2 = .077, F (2, 120) = 6.058, p = .003). Age negatively predicted career aspirations (β = -.437, p = .001, 95% CI = -.409 - -.112). Playing level positively predicted career aspirations (β = .339, p = .008, 95% CI = .159 – 1.042).

Results: objective 3

Examining AMOS modification indices indicated that correlating error terms for aspirations and beliefs would enhance model fit. Given that aspirations and beliefs are theoretically and conceptually linked (e.g., Rudman & Phelan, 2010), there was rationale for correlating their error terms beyond simply enhancing model fit (Byrne, 2006).

The revised path model (see figure 6.2) showed an excellent fit: χ^2/df = .559; CFI = 1.00; SRMR = .026 and RMSEA = .000). The model indicated that perceptions of TDE had a large effect on basic psychological need satisfaction (.59), which in-turn had a moderate effect on career aspirations (.40) and career beliefs (.48). Career beliefs and aspirations both had a moderate effect on career intentions (.48).

Figure 6.2 *Revised path model of factors predicting career intentions in talented UK female football players*

Discussion

The aim of this study was to examine talented female football players' perceptions of their TDE and basic psychological need satisfaction, with a view to understanding how these factors predicted career intentions, beliefs and aspirations. Moreover, we aimed to understand whether players' career intentions beliefs and intentions varied by their age or playing level. We discovered that as female football players get older, their intention to pursue a professional football career decreases, whilst intentions increased with playing level. The aim of the following sections is to consider these findings in light of the existing literature and offer salient future research and applied recommendations.

Echoing recent research findings (e.g., Mills et al., 2014a; Wang et al. 2011), long-term development focus was the strongest scoring area from the TDEQ. Specifically, players rated the variety of training methods experienced, being reminded of the importance of commitment in becoming an elite-level player and receiving a good standard of support when injured as having the highest levels of positive agreement. This is important for a number of reasons. First, positive perceptions of long-term development focus have been associated with the use of mastery-approach goals (Wang et al. 2011). In a practical sense, a mastery orientation is more likely to result in a more positive attitude (Elliot & Dweck, 1988) and heightened goal pursuit (Wang et al., 2011). Next, a TDE that is deficient in long-term development focus may lead to a heightened risk of burnout (Isoard-Gauther, Guillet-Descas, & Lemyre, 2012), which is also associated with heightened risk of injury (Roberts, 2014) and dropout in sport (Balish, McLaren, Rainham, & Blanchard, 2014).

Given the above, we proffer that by promoting a long-term development focus within TDEs, coaches are more likely to produce players who have a stronger behavioural intention and a higher level of intrinsic motivation, both of which can be determining factors in sport continuation (Gucciardi & Jackson, 2015). As sport continuation is a sign of commitment and

commitment is an important factor in talent development in football (e.g. Holt & Dunn, 2004; study three), affording attention to long-term development focus is an important consideration for football coaches.

The perception of the support network within the TDE was the second highest scoring TDEQ factor. The strength of the support network is noteworthy as Ivarsson et al. (2015) forwarded that players who perceived their TDE as having a long-term development focus and as having a strong support network appeared to experience higher wellbeing and feel less stressed than other players. This has implications for talent development as the stress-recovery balance has been shown to link to injury and illness in elite youth football players (Brink, Visscher, Arends, Zwerver, Post, & Lemmink, 2010) and because injury is one of the major reasons for career termination from sport in female athletes (Ristolainen, Kettunen, Kujala, & Heinonen, 2012). Finally, having a strong support network is also important as this has been linked to increased performance levels (e.g., Rees, 2007), providing an effective coping resource for youth football players (e.g., Reeves, Nicholls, & McKenna, 2009) and for potentially reducing the fear of failure (e.g., Sagar, Busch, & Jowett, 2010). Collectively, these considerations are likely to positively impact on talent and career development and transitions in female football (see study three).

Despite several strengths in the perceptions of TDEs, there were also several areas for improvement. First, the factor 'communication' was the lowest level of positive agreement. These perceptions echo findings from study three which highlighted that ineffective communication on the part of coaches – specifically pertaining to areas of identifying strengths and weaknesses, and goal setting – were perceived to be contributing factors in female football players not progressing to a senior level. Moreover, evidence suggests that a coach's ability to communicate effectively with players about the requirements for progressing through levels is an important consideration for successful career progression in female football (e.g., study two). This is noteworthy given that key areas for improvement within the 'communication' subscale results related to communicating about influences over football career progression (e.g., discussing what previous elite performers did to progress; clear goal setting for progression; identifying what the next big test will be in football). As the issues relating to inadequate goal-setting are a historical trend in talent development literature (e.g.,Vaeyens, Lenoir, Williams, & Phillipaerts, 2008), we add our findings as evidence of a need for greater support for coaches in these areas.

A key finding from the descriptive analysis is the level of agreement that female football players are often written off before they have had the opportunity to reach their full

potential. This was the item with the lowest level of positive agreement from the TDEQ. In the absence of coach-level data, it is difficult to interpret why this may be. However, the competition for licenses to run a girl Centres of Excellence or the need to for FAWSL development squads to be effectively developing talented players ready for the first team may play a role in decisions to either select or de-select a player. Moreover, when a CoE has a female player progressing to youth international level this is seen as a marker of quality for the CoE (study three); thus will often be used as a marketing tool to attract better players. Intuitively we suggest that a perceived pressure to produce players capable of playing for the youth and ultimately senior international teams may lead to a scenario where current performance is prioritised over future potential.

The in-depth interpretation of relationships between TDEQ and BNSSS subscales was limited by the need to parcel data. Whilst parcelling data has benefits of enhancing model fit and improving psychometric properties of scales, it also has the potential for estimation bias and model misspecification (Matsunaga, 2008). As our goal through this study was to examine the relationships between different constructs to determine their role in career intentions of UK female football players, as opposed to examining item or factor structure of the scales per se, parcelling was warranted (Little et al., 2002). For example, we denoted a poor fit with both the TDEQ and BNSSS. One method of dealing with this poor fit is to correlate residuals (Byrne, 2006). Parcelling is as effective at eliminating the residual as correlating residuals, therefore we saw that parcelling aided rather than hindered the process of model production (Little et al. 2002; Matsunaga, 2008).

In accepting these limitations, we suggest that the significance of TDE perceptions in predicting career intentions may be explained through a content analysis of items and through a theoretical integration of BPNT and TPB (cf. Chan & Hagger, 2012; Gucciardi & Jackson, 2015). For example, when female football players perceived their TDE as having a long-term development focus, they felt had control over their behaviours and felt capable of performing well. These are congruent with perceptions of autonomy satisfaction, competence satisfaction, perceived behavioural control and adaptive attitudes. Second, we suggest that high levels of agreement with TDEQ items relating to coaches allowing and valuing player input and coaches emphasizing the role that players can have in each other's development suggests that players feel socially valued and have a sense of shared purpose and connection. This is consistent with the notion of relatedness satisfaction and more affective attitudes, with the latter being particularly noteworthy given its positive influence on adaptive decisions and behavioural intention (e.g., Lawton, Conner, & McEachan, 2009). Finally, strong agreement

with statements relating to coaches helping players to understand what they are doing and why, understanding long-term benefits, and discussing the importance of training and development over winning suggests that players understand the rationale for engaging in behaviours and demonstrating a willingness to engage. This demonstrates an ascription to subjective norms. Collectively, these points suggest a greater degree of basic psychological need satisfaction as well as suggesting that the three major components of intention formation (subjective norms, attitudes, and perceived behavioural control) were present in female players. As behavioural intention is a strong predictor of behaviours (Ajzen, 1991), this highlights the importance of having a long-term development focus for encouraging adaptive developmental behaviours in talented UK female football players.

In addition to having a long-term development focus, basic psychological need satisfaction is an important consideration for coaches as it has been linked with higher levels of intrinsic motivation (Wang et al. 2011). Importantly, highly intrinsically motivated football players are more likely to make medium-term progression into international age groups (Zuber, Zibung & Conzelmann, 2015). In a practical sense, medium-term progression into international age groups in female football usually affords players greater developmental opportunities (e.g., studies two and three), thus increasing their chances of progression to a senior elite level. Combining this with our finding that an increase in playing level positively and significantly predicts career intentions, beliefs and aspirations, the implications of heightened sense of basic psychological need satisfaction for talent development in UK female football are clear.

Examination of the mean values for career intentions indicates that female players' intentions to pursue a professional football career significantly decreased from age 15 to age 18. This is a notable consideration as study three demonstrated that parents and teachers were sometimes perceived to contrive to 'counsel' female football players away from football if it was not seen as a viable career option. Given that in the UK the ages 15 – 18 years contain significant educational challenges in the form of the General Certificate of Secondary Education qualifications and Advanced Level qualifications (or their vocational equivalents), significant dual career challenges may be presented. Often substantial pressure is experienced by students (e.g., Brown, 2012) and teaching staff (e.g., Stewart, 2014; Wiggins, 2015) to achieve target grades in these important life stages. Therefore 'distractions' such as football may be foregone as teachers may worry about young female football players becoming a 'fail statistic' if they do not spend more time on their studies, so call on parents to reinforce non-football ventures (e.g., study three).

Strengths

To our knowledge, this is the first study of its kind to examine talented and elite female football players' perspectives of their TDEs and how these perceptions may affect a players' career aspirations and intentions. As such, we have extended completed through studies two and three in a manner more generalizable to talented UK female football players than existing literature (e.g., Quested et al. 2013). Whilst studies within male football (e.g., Mills et al. 2014) have examined players on the cusp of making the junior to senior career transition, we elected to explore the opinions of players from a much younger age as studies two and three highlighted that female football players began to make football career-orientated choices as early as 13 years old, and at times these choices resulted from their perceptions of elements of their talent development environment. To date, this is the largest scale UK-based study of its kind, therefore the findings have real-world applications for those seeking to enhance the developmental experiences of talented female soccer players in the UK.

A further strength comes through the study design. Literature within this domain has thus far tended to use non-sport specific measures of basic psychological need (e.g., Taylor & Bruner, 2012). Further, previous literature has not measured the degree of wider involvement in the life of a developing football player (e.g., Curran et al., 2013). Through using the sport specific BNSSS and the TDEQ, we may have enhanced the ecological validity of data collection, thus increasing the potential for this to be translated into findings with practical, football-based implications. The research trend in recent years has been to predominantly focus on the importance of autonomy supportive coaching in recreational football environments and has largely been completed with understanding dropout (e.g., Curran et al., 2013; Quested et al., 2013) or enhancing psychological wellbeing (e.g., Balaguer et al., 2012) as a central focus. We have extended this perspective by examining the role of basic psychological needs satisfaction in talent development environments, adding a new strand to research utilising the BPNT.

These strengths aside, the study is not without limitation. First; owing to the anonymous nature of data collection, it was not possible to track players' careers. Without this, it was not possible to directly examine the impact of perceptions of TDEs and basic psychological need satisfaction on career progression. To address this limitation, we have used established motivational theory to underpin our discussions regarding the impact of career intentions, beliefs and aspirations on talent and career development in UK female

football. Future research should seek to longitudinally track players throughout their career with a view to testing the predictions of study three more tangibly.

Next; whilst our sample size was unmatched previously in talented UK-based football research with talented female football players, our survey response rate was less than 20% of the estimated eligible talented female players in the country. To defend this limitation, we contend that the study provides information that is representative of the talented female football population in the UK for two reasons: (1) participants were drawn from the north, midlands and southern England and included players from each age bracket (13 – 21); and (2) we received responses from over 40% of players within the organisations who provided the initial gate keeper consent. We would urge funding providers (e.g., National Governing Bodies) within the UK to support the wider investigation of this topic, particularly given the proximity of these findings with the release of the England player 'DNA' (Football Association, 2014).

Finally, the TDEQ was initially designed and validated as a general sport measure. As such, its application may not be sensitive to the nuances of specific sports, such as football. For example, there is strong scholarly opinion supporting the notion that early engagement with football-specific play and practice activities, which are then sustained and developed consistent with the needs of the player over a long period of time, is a strong predictor of reaching an expert level in soccer (e.g., Haugaasen & Jordet, 2012). As such, coaches within football are less likely to advise players to take part in other sporting activities over football specific practice. This is a noteworthy consideration as items associated with sporting diversification that are answered with low levels of agreement on the TDEQ would indicate lower levels of satisfaction with the talent development environment. In addition, the 'challenging and supportive environment' subscale of the TDEQ has been shown to demonstrate inadequate internal consistency reliability (cf. Ivarrson et al., 2015; Wang et al., 2011). As such, we offer that a football-specific measure of the TDEQ that is sensitive to the nuances of the football sub-culture and based on relevant football-specific systematic reviews (e.g., Haugaasen & Jordet, 2012) would serve to further enhance the ecological validity of measures of player perceptions in football.

Future directions

Future research would benefit from a longitudinal analysis over the course of a season and with a follow-up of player careers at different critical stages of career transition (e.g. progression through age-groups and successful graduation to a senior professional career), so as to provide further applied advice for practitioners. Examining temporal changes in

perceptions of TDEs would afford practitioners the opportunity to investigate how and why these changes happen, facilitating progress towards developing optimal talent development environments that are responsive to the dynamic needs of UK talented female football players. Future studies would also benefit from longitudinally tracking players to assess the predictive validity of the measures used within this study. For example, does a player having stronger beliefs, aspirations and intentions to pursue a professional career result in them actively engaging in behaviours commensurate with the requirements of being a professional female player? Moreover; longitudinal tracking of players would allow for a more objective analysis of the impact of perceptions of talent development environment, for example by examining whether players who perceive their TDE as more positive and facilitative for their career have more successful careers / are more successful in their attempts to reach a senior football career than those who have more negative perceptions of their environment.

Concluding remarks

Players' perceptions highlighted a largely positive view of TDEs in UK female football, however some key historical concerns (e.g. the perception of players being written off before they have chance to fully develop) remain. Findings provide support for some of the predictions offered by study three as perceptions of TDEs predict basic psychological need satisfaction, which predicts career aspirations and beliefs, which in turn predicts career aspirations. However, longitudinal tracking of players is required to directly assess, rather than indirectly predict, career progression in UK female football players. Such longitudinal research would benefit from utilising the more recent version of the TDEQ (TDEQ-5; Li, Wang, Pyun do, & Martindale, 2015). This 25-item measure is shown to be appropriate for use within TDEs and would place a smaller demand on young players, thus reducing the risk of dropout from longitudinal research.

Chapter 7: General Discussion

This chapter provides a summary and discussion of the findings that arise from this thesis. First, a summary of each study's findings are provided. Within each of these sections, the original contributions to the body of literature afforded by these studies are included. Second, the strengths of the thesis overall are discussed, in addition to those provided in each of the individual chapters. Third, applied implications of findings are discussed, including an overview of the impact of the thesis. Fourth, the discussion provides limitations and future directions arising from the research, before closing with concluding remarks.

The aim of this thesis was to understand the psychosocial factors associated with talent development in UK female football and how this understanding might then be applied within the context talent development environments, to facilitate the career development of talented female football players within the UK. In its embryonic stage, the thesis was centred on the premise that the bourgeoning body of research in talent development in football had an important contribution to make within the development of elite female youth players in the UK. However, for the body of research to have applied implications, research findings must be context-specific so as to provide practitioners with the firmest platform from which they can base their practice (Ryba et al., 2013).

Thus, this thesis is based around a key finding of study one where the systematic review highlighted a dearth of literature that has examined talent development in the context of UK female football and that the role of other key social agents (e.g. coaches, family members, peers) in the development of female football players was under-investigated outside elite male youth football (e.g., Holt & Dunn, 2004). Consequently, study two of this thesis focussed on examining the developmental experiences of elite female youth football players from the UK, whilst study three examined the experiences of negative case former female youth football players and other key social agents to produce a grounded theory of holistic career development in UK female football players. Pragmatically, a critique of grounded theories within this domain (e.g., Holt & Dunn, 2004; Holt & Mitchell, 2006) is that their predictions remain untested. Therefore, study four aimed test key predictions of the grounded theory produced in study three so as to assess the veracity of research findings and test the predictive validity of the grounded theory.

Study four represented a shift in research paradigm, demonstrating the iterative research process and the evolution of this thesis over the course of the programme of research. This paradigmatic shift also demonstrates an acquired appreciation of the benefits of a pragmatic approach to research, such as the ability to garner a greater breadth and depth of information regarding a specific topic area within a single thesis or programme of research

(e.g., Albright, Gechter & Kempe, 2013), as well as researcher skill development within contemporary research methods such as structural equation modelling.

Study one: A systematic review of psychosocial factors associated with player development in football

The primary aim of this study was to review the extant literature that has examined psychosocial factors associated with talent development in football, with a view to gain a detailed understanding of the existing research landscape. The original contributions offered by this study are centred on the manner in which studies were consumed, appraised and represented, as well as the proffered nature of the relationships between the different psychosocial factors. The consumption of retrieved studies involved the process of in-dwelling whereby studies were read and re-read to gain a thorough understanding of each. After this, papers were appraised using the Mixed-Methods Appraisal Tool, designed to allow for the appraisal of papers contained within mixed-studies reviewed using a single appraisal tool. Finally, using the key psychosocial factors gleaned from the studies, a convergent thematic analysis and concept map was produced that provided not only a list of key factors associated with talent development in football, but also an interpretation and representation of the nature of the relationship between these factors and how they may affect a players developmental trajectory. In presenting a transparent overview of how the knowledge was gleaned and created through the systematic review, we afforded the reader greater opportunities to appreciate the research within a given context. This provided a new direction from systematic reviews in this area where the transparency of methodological detail was largely absent (e.g., Haugaasen & Jordet, 2012).

An impactful finding of study one was that there was a dearth of literature that had examined talented female football players within the UK, with the absence of a single study being telling. Given the proximity of the systematic review to the development of the FAWSL and the redevelopment of the FA Girl's Talent Pathway, the implications for this lack of research-base are potentially wide-reaching. A further key finding was a dearth of longitudinal literature, demonstrating a potential lack of developmental understanding within existing research. Finally, there was confusion within the literature over definitions used (e.g., elite, club-level, recreational) with different studies with seemingly different levels of football player being defined as the same level (e.g., semi-professional and youth international both being defined as 'elite'). Collectively, these findings leant support to the wider notion that female athletes in general are under-represented within sport psychology literature (cf. Conroy et al. 2008). Collectively this, and the longstanding notion that female

athletes and male athletes have qualitatively different experiences (e.g., Gill 2001; Holt & Morley, 2004), provided the foundation rationale for further investigation of the developmental experiences of elite female youth football players.

Study two: Developmental experiences of elite female youth football players.

To advance the literature on talent development within elite female football players, the primary aim of study two was to gain a richer insight into the developmental experiences of elite youth female football players. In order to address the dearth of literature with a developmental approach, a composite sequence analysis was used to demonstrate key experiences at different stages of a female football player's career and how the role of key social agents changed. In doing so, this study adds original contributions to the body of literature not only due to the nature of the sample (elite level female youth football players), but also the nature of the knowledge gained (i.e. developmental nature of the understanding, greater depth of understanding of the dynamic roles of key social agents in a female football player's career), as represented in figure 3.1. Further, by conducting this research whilst players were developing through their careers, this study was less at risk of errors associated with retrospective recall.

The findings of study two suggested that the football experience of fathers and / or older brothers played a significant role in the players' development. Football fathers were able to provide advice and guidance specific to the needs of their daughter-player at different age ranges whilst at the same time reinforcing the importance of coach-player relationships. Football brothers acted as either positive or negative models for their sister-players and served as a source of information about key career choices. However, as none of the players in the study had either sisters or mothers who had been involved in professional football, it was not possible to ascertain whether the influence of the advice offered would have been any different if it had come from a different family member. Friends inside (termed football friends) and outside (termed non-football friends) football played a significant role in helping players to lead the disciplined lifestyle required of an elite youth football player. Finally, findings suggest that self-regulation and adaptive volitional behaviours appear to be key intra-individual factors associated with talent development in female football.

Study 3: A holistic perspective on career development in UK female soccer players: A negative case analysis

As all of the players in study two had been successful in attaining an elite youth career and had progressed into a professional career in the context of women's football, it was not possible to determine whether their experiences would be consistent with players who did not

make it in football. Further, study two solely sampled players, therefore the opinions of other key social agents – such as coaches and peers – were not reflected. The findings from study two, combined with the associated limitations, formed the foundation of the rationale for study three.

The purpose of study three was to examine career experiences of UK-based female youth soccer players from a holistic perspective with a view to producing a grounded theory of factors contributing to career/talent development and transitions in UK youth female soccer. However, in-keeping with theoretical sampling (Corbin & Strauss, 2008) multiple social agents were also subsequently sampled (see figure 4.1) as the iterative cycle continued. The results from study three suggest that multiple social agents (players, team-mates, peers, teachers, parents and siblings) need to optimally interact to ensure that an optimal talent development and learning environment is created. This will provide a supportive holistic talent development environment, lead to adaptive player-level changes, and a greater chance of successful athletic and dual career development (see figure 4.2). In offering this grounded theory, accepted limitations were that the predictions had not yet been tested and that the study did not contain any players who had attained and maintained a professional career.

This study presents original contributions to the literature through the rich understanding of the dual careers of players who did not make it in female soccer. Using this negative case analysis demonstrated the effective adoption of a relatively under-utilised approach within sport psychology literature (see study one) as well providing further representation for a traditionally marginalised research population (see study one; Stambulova & Ryba, 2014). Further, by considering these negative case perspectives alongside of a range of important social agents, we were able to construct a substantive grounded theory of factors contributing to career/talent development and transitions in UK youth female soccer, opening up theoretical predictions that can now be tested. As a result, these findings may contribute to policy and practice development in UK female youth soccer.

Study 4: Psychosocial factors predicting career intentions of talented UK female football players

As a common critique of existing grounded theories is that their predictions will often remain untested, the purpose of study four of this thesis was to – within the scope of this thesis – test some of the key predictions of the grounded theory provided through study three. The primary aim of study four to understand perceptions of talent development environments (TDEs) in talented female soccer players and to test the following hypothesized model: Perceptions of TDEs positively predicts basic psychological needs satisfaction (BPNS),

which positively predicts career aspirations and beliefs, which positively predict career intentions in UK female youth football players. Drawing on some of the age and playing level-related findings in studies two and three, study four also aimed to examine and age and playing level differences in career intentions. As it was not possible within the scope of the programme of research to longitudinally track players and monitor their career progression to an elite level, theoretical integration (e.g., Gucciardi & Jackson, 2015) was used to integrate the grounded theory provided through study three, Basic Psychological Needs Theory (e.g., Deci & Ryan, 2000) and the Theory of Planned Behaviour (Ajzen, 1991) to theoretically ground the hypothesized model and make the link between career intentions and career progression.

To achieve these aims, 137 talented female football players from dispersed geographical locations in UK completed a self-report questionnaire that assessed the variables of interest. The questionnaire comprised of the Talent Development Environment Questionnaire (TDEQ; Martindale et al., 2010), the Basic Needs Satisfaction in Sport Scale (BNSSS; Ng et al. 2011) and statements designed specifically for this study to assess career aspirations, beliefs and intentions. Quartiles and content analysis were used to highlight strengths and areas for improvement in UK female football TDEs. Linear regression was used to assess the relationship between age, playing level and career intentions. Bootstrapped, bias corrected path analysis was used to test the revised path model.

Results of study four indicated female players' most positive perceptions of their TDEs were centred on long-term development focus, whereas the most prominent area for improvement within TDEs was the perception that players can be 'written off' before they reach their potential. Linear regression indicated that age negatively predicted career intentions whereas playing level positively predicted career intentions. Finally, the path analysis demonstrated excellent fit for hypothesized model. However, career intentions were used as the outcome variable in place of longitudinal investigation of career transitions. Further, due to the anonymous nature of data collection, it is not possible to longitudinally track playing careers over time. Therefore, further research may be required to longitudinally track players over the duration of their career.

This study advances our understanding of talent development in football as it has provided a contextually and culturally specific level of understanding not previously demonstrated in existing literature. As such, study four has applied implications for talent development in UK female youth soccer as it provides evidence to support key theoretical predictions offered through study three. From this, these can then be used to provide

recommendations for coaches and other key social agents regarding structuring an effective TDE to enhance career aspirations, beliefs and intentions in talented female youth football players.

Strengths

In addition to the reported study-specific strengths that have commented on the original contributions offered as well as methodological strengths, there are additional strengths that permeate throughout the thesis. Given their potential impact on research and practice within UK female football, these strengths warrant discussion.

First, findings have been reported and discussed wherever possible through a culturally and contextually-specific lens (e.g., specifically within the context of UK female football; within the context of female adolescent development; or within the context of dual career challenges specifically associated with female football players). In a move away from an "ethnocentric" (Ryba et al., 2013, p.123) knowledge base formulated from white, male athletes (see study one), this thesis has provided a level of understanding about the broad-ranging psychosocial factors associated with talent development in UK female football. By way of example, study three highlighted how negative perceptions and connotations from significant others (both within and outside football) of the sexuality of female football players impacted on decisions regarding career progression which ultimately impacted on talent development. Findings of this nature have not previously been reported in talent development literature, yet may impact on the work of practitioners within UK female football environments.

Second, this thesis has explored the role of social agents that have otherwise been under-represented in talent development literature. The roles of siblings, peers both inside and outside football, and family structure are all largely absent from talent development in football literature; yet, findings reported in this thesis talk to a unique importance of these different social agents within talent development in UK female football. For example, having an older brother who has played football to a high level appears to be an important developmental asset from football specific perspective (see study two). Despite this, it was not possible to assess whether it was the type of sibling, or the information and skillset that the sibling possessed that was the important developmental asset, given that none of the players had female siblings who had been either talented or elite level football players. Further research involving female siblings who have played football to a high level (e.g., centre of excellence or FA Women's Super League) would serve to advance our existing knowledge around whether female siblings may have the same developmental benefits.

Equally so, whilst the majority of peer-focussed research has been based on the role of sport-based peers (e.g., Keegan, Spray, Harwood, & Lavallee, 2010; Moran & Weiss, 2006; Weiss & Shuntz, 2004), scant research has centred its attention on peers outside of football (see study one). Through attending to the roles of non-football friends as well as football friends, this thesis has opened up a valuable line of enquiry. The role of non-football peers in helping players to lead a disciplined lifestyle, helping players to cope with setbacks in football, and providing a sense of 'normality' outside football (see study two), as well as the social pressures that can be exerted by non-football friends that can be deleterious for talent and career development (see study three) have been forwarded. Given the value and importance that adolescent females place on social relationships during mid-late adolescence (e.g., Blom et al., 2013); non-football peers may be an important developmental asset that warrants further exploration. A version of the Sport Friendship Quality Scale (SFQS; Weiss & Smith, 1999) adapted to reflect football players' relationships with non-football based peers may serve to extend the breadth of understanding gleaned through this thesis.

Applied implications and impact

Throughout this thesis, study-specific applied implications have been considered within each chapter, relevant to the outcomes of each study. To further this, consideration of the applied implications of the thesis as collective-whole of work is warranted – both from the perspective of how the findings may benefit the work of applied practitioners as well as through examples of how the findings have already been used to inform the work of practitioners within UK female youth football.

As female youth football is frequently recognised as fiscally under-resourced (see study three), the findings of this research have implications for empowering those associated with the development of female football players with a knowledge-base and skillset that can serve to enhance the developmental experiences of elite female youth football players in the UK. For example, by identifying key dual career challenges and sources of role strain, researcher-practitioners may be able to work with players in such a way that develops competencies which may reduce role strain by preparing players for both football and life. Indeed, psychosocial skills and competencies such as giving and receiving feedback, forging inter-personal relationships, and reflection are required in general life as well as being requisites of talent development (e.g., Côté, Bruner, Erickson, Strachan, & Fraser-Thomas, 2010; Gledhill & Harwood, 2014; Gould & Carson, 2008; MacNamara, Button & Collins, 2010a, 2010b). By working productively to equip UK female football players with these psychosocial competencies, researcher-practitioners may forge stronger links between

positive youth development (e.g., Gould & Carson, 2010) and talent development research and practice perspectives (e.g., study two), enhancing the chances of career and talent development (e.g., study three).

The findings of this thesis have been used by the author along with a sport science and medicine team to underpin the creation of a player psychosocial development strategy within a Football Association Licensed Girl's Centre of Excellence. Positioning the findings from this thesis alongside the tenets of Ecological Systems Theory (Bronfenbrenner, 1977; 1979), this strategy has included three key aspects: (1) player education; (2) coach education, and (3) parent education. Player-level education sessions focussed on raising players' awareness of different psychosocial competencies (e.g., self-regulation; discipline; social competence) that have been shown to have a role in players reaching a youth elite level (see study two) as well as the absence thereof having a role in players not 'making it' to the highest level (see study three). Coach and parent education focussed on awareness raising of these key psychosocial competencies as well as strategies for coaches and parents to support players in developing these (e.g., coaching practices that integrate functionally relevant challenges for players; the use of reflective questioning by coaches and parents when 'chatting' about football; consistent developmental messages from coaches and parents). An addition to the coach and parent workshops included information regarding the key dual career challenges that talented adolescent female football players face in the UK and how they as coaches and parents may help to support players with these (e.g., parents playing a co-ordinating communicative role between players, coaches and teachers for youth international players to reduce conflicting demands and, thus, reducing the potential for role strain and dropout).

Limitations and future directions

The study-specific limitations have been discussed in each of the associated chapters. However, whilst attempts were made to reduce the volume and impact of limitations within each study, there are some limitations that span each study and, as a result, warrant broader discussion collectively. This discussion will then be used to inform additional future research directions to advance the body of research from this point forth.

First, the completion of each study relied predominantly on player-level interviews or self-report measures. With these brings the potential concern surrounding social desirability. Whilst specific strategies were used to try to counter this concern (e.g., in study two not interviewing any players whom had been coached or received sport science support by the author, adopting data triangulation and member reflections in study three, conducting anonymous questionnaire data collection in study four), the potential for socially desirable

answers warrants mention. This may be a particularly prominent consideration given the nature of the participants in studies two and three. Adolescent females have a tendency to place great emphasis on social relationships as well as seeking social approval from authority figures (e.g., Blom et al., 2013). Given that researchers can be perceived as authority figures by research participants in interview settings (Anyan, 2013), this potentially increases the risk of socially desirable answers (Coolican, 2014). Additionally, in study four, all players were part of talent development environments in the UK. As questionnaire items pertained to career intentions, beliefs and aspirations as well as players' perceptions of their talent development environments, there was a potential risk for social desirability bias. Whilst bias-corrected bootstrapping was adopted as part of the data analysis procedures for study four, future research may seek to adopt specific social desirability subscales (e.g., van der Mortel, 2008).

A further future recommendation that could reduce potential issues of social desirability could be to adopt an observational or ethnographic approach to research. In doing so, the researcher will be less reliant on the first-hand interview accounts of research participants. Observational and ethnographic approaches to research are, as yet, under-utilised in talent development studies (see study one) but would be a noteworthy consideration for researchers seeking to assess the dynamic nature of interrelationships between key social agents (Erickson & Stull, 1998) and how these may affect the developmental trajectory of talented female football players in the UK. Given the impact of coaching behaviours on the developmental experiences players (see studies two, three and four), either the Coaching Behaviour Assessment System (Smith, Smoll & Hunt, 1977) or the Coach Analysis and Intervention System (CAIS; Cushion, Harvey, Muir, & Nelson, 2012) may serve as a useful tool for observing the behaviours of football coaches of female football players, with a view to informing and developing their practice.

Second, whilst parents were frequently cited as an important social agent throughout studies two and three, primary data was not collected with parents. Their inclusion in study two was inconsistent with the aims of the study, whereas many players included in study three did not consent to their parents being contacted for interview. In accepting that not including parents for primary data collection may have removed a potentially rich source of data from these studies, it also demonstrates a strict adherence to ethical practices by recognising the holistic wellbeing of research participants as a central consideration in the study by allowing for their requests with respect and confidentiality in mind (e.g., British Association of Sport and Exercise Sciences, 2009).

Resultant from this, a future research direction would be to examine female football players' parents perceptions of their role in their daughter-players' development. Consistent with previous football research (e.g., Holt & Dunn, 2004), fathers were most frequently discussed by female players in studies two and three as being the parent most influential in their football development. However, findings from study two suggest that it was the football experience of the father, as opposed to the father per se that was influential in the player's development. However, due to the absence of any mothers with equivalent experience in football, it is not possible to assess whether receiving the same type of information from a different would have any more or less of an impact on a player's development.

Notwithstanding these limitations, football parents are a key social agent given the developmental opportunities they can afford talented female youth football players. When combining the parental influence with the incentive value of the knowledge and experience within football, the 'football father' appears to have a greater potential for developmental influence than coaches (see study two). These findings present a variation on previous parenting propositions in youth sport which suggested a diminished or declining role of parents as athletes got older (e.g., Wylleman & Lavallee, 2004), as the football fathers in this thesis appear to retain the same degree of involvement, albeit with changes in focus of informational support as players' careers progressed.

Further investigation of football fathers may be used in combination with the findings of the studies in this thesis to inform parent education programmes. Such education programmes may serve to support parents with their roles within TDEs, given the emergent recognition and research attention afforded to parenting expertise (e.g., Harwood & Knight, 2015). Further, by understanding talent development in UK female football from the parents' perspectives, researchers may develop an additional layer of interactional understanding that explores key social relationships (e.g., player-parent; parent-coach; parent-coach-support staff) that are currently under-represented in football-specific research (e.g., Blom et al., 2013). Given the upcoming changes to the English Football Association Girls' Talent Pathway and the requirement for a greater breadth and depth of support staff for female players, understanding the interactional relationships between players, coaches and support staff and how these impact on player-level talent development may be a particularly fruitful avenue for future research.

A third limitation of the studies in this thesis is that none contain insight from senior elite female football players. Study two did not track players throughout their senior elite players, the players in study three were negative case players who had experienced UK-based

talent development environments but were unsuccessful in their attempts to have a career in UK female football and study four surveyed only talented and elite female youth football players up to 21 years-old. The inclusion of elite senior players may shed further light on the requirements for maintaining a successful elite senior career, as opposed to attaining one. This could be achieved by researching the experiences of elite senor female players from a retrospective perspective, or using a longitudinal, prospective approach that tracks the development of female players over time and into their senior careers. In making this recommendation, it is accepted that a key concern for researchers in embarking on the latter would be that there is no guarantee that a cohort of players or even a single player from a prospective cohort would be successful in their attempts to forge a professional career (Haugaasen & Jordet, 2012). To counter this concern, researchers may seek to adopt a multiple case study design involving different TDEs in the UK whereby players are tracked over a period of time with their developmental trajectories monitored alongside this, thus allowing for a within- and cross-case analysis (Miles & Huberman, 1994).

A final potential limitation of the studies contained within this thesis is the lack of generalizability of findings. Whilst this limitation and its relative impact is one that will be largely determined by the reader's ontological, epistemological and axiological perspective, it is nonetheless noteworthy with the interests of transparency in mind. The conducted studies had the over-arching aim of understanding talent development in UK female football players and were conducted with this aim in mind. Therefore data was collected and analysed within UK-based players (and associated social agents), and reported in a manner that would be able to inform and enhance applied practice within the UK. For example, the grounded theory produced in study three was purposefully produced as a substantive theory aimed at facilitating the development of UK female football players, as opposed to formal theory that may have multiple applications across sports, countries and cultures. In approaching the research in this way, it is accepted that the results may not be generalizable beyond UK TDEs or players, however it is also arguable that this lack of generalizability is a key strength of the thesis as it is an indicator of the depth of understanding garnered within a specific population (e.g., Sparkes & Smith, 2014).

Given that coaches within study two highlighted a sense of lack of preparedness to develop psychosocial competencies within their female players as well as intimating that these qualities were not as valued as a player's technical or tactical ability, a worthwhile empirical future research direction would be to ascertain the level of coach appreciation (both in terms of relative value in player development as well as conceptual understanding) of

different psychosocial competencies associated with talent development in UK female football. For example, players in study three highlighted how they felt under-valued by coaches than their more technically and tactically skilled counterparts and there was a moderate level of agreement from players in study four that players are often written off before they have had the opportunity to reach their full potential. Equally, players in studies two and three felt that there was little coach-level attention paid to player-level psychosocial development. Therefore, by examining coach-level perceptions of psychosocial competencies, the body of research may be able to target awareness-raising and education programmes centred on helping coaches to create different ways of developing these competencies with their players (cf. Harwood, 2008; Harwood & Anderson, 2015). In making this recommendation, one must be mindful that football has historically been resistant to change (Pain & Harwood, 2004) and that formal coach education in football tends to result in minimal changes to coaching behaviour (Stodter & Cushion, 2014). As such, informal learning environments that offer social interaction may be the preferred method of coach development for such education programmes (Stoszkowski & Collins, 2015).

Concluding remarks

To the author's knowledge, this is currently the only collection of studies that has focussed solely on UK female football players, as well as containing the largest-scale study to date within this burgeoning topic area. As such, it is hoped that the findings will invigorate and stimulate greater research attention within a research population that remains relatively under-represented in sport psychology literature. It is clear that successful players possess, and coaches value, a number of psychosocial assets; yet it is also clear from the studies in this thesis that little attention, be it a conscious or unconscious decision, is afforded to developing these assets in female players from a young age. What is clear from this research is that coaches within UK female football feel under-prepared and under-resourced to help players with their psychosocial development. In addition, it has emerged from this programme of research that female football players in the UK face significant dual career demands which can be exacerbated by key social agents (e.g., parents, coaches and teachers). Finally, this research has also demonstrated that the TDE experienced by a female football player affects their perceptions of basic psychological needs satisfaction and, ultimately, their career aspirations, beliefs and intentions within female football. As such, applied research centred on the education of players, coaches and parents as to their individual and interactional roles in the development of female football players and their careers, as well as how key

psychosocial assets can be developed, would go some way to helping female players have the best chance of reaching an elite level career in UK female football.

References

Abuhamdeh, S., & Csikszentmihalyi, M. (2012). The importance of challenge for enjoyment of intrinsically motivated, goal directed activities. *Personality and Social Psychology Bulletin*, *38*, 317 – 330.

Albright, K., Gechter, K., & Kempe, A. (2013). Importance of mixed methods in pragmatic trials and dissemination and implementation research. *Academic Pediatrics*, *13*, 400 – 407.

Alfermann, D., & Stambulova, N. (2007). Career transitions and career termination. In G. Tennenbaum & R.C. Ecklund (Eds.), *Handbook of sport psychology* (pp. 712–733). Hoboken, NJ: John Wiley & Sons.

American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6th ed). Washington: American Psychological Association.

Anyan, F. (2013). The influence of power dynamics in data collection and analysis stages: A focus on qualitative research interview. *The Qualitative Report*, *18*, 1 – 19.

Babkes, M.L., & Weiss, M.R. (1999). Parental influence on children's cognitive and affective responses to competitive soccer participation. *Paediatric Exercise Science*, *11*, 44 – 62.

Baker, J., Côté, J., & Abernathy, B. (2003). Sport-specific practice and the development of expert decision making in team ball sports. *Journal of Applied Sport Psychology*, *15*, 12 – 25.

Bash, M., & Salmela – Aro, K. (2013). Burned out to dropout: Exploring the relationship between school burnout and school dropout. *European Journal of Psychology of Education*, *28*, 511 – 528.

Belmont, M., Skinner, E., Wellborn, J., & Connell, J. (1988). Teacher as a social context: A measure of student perceptions of teacher provision of involvement, structure, and autonomy support (Tech. Rep. No.102) Rochester, NY: University of Rochester.

Bengoechea, E.G., & Strean, W.B. (2007). On the interpersonal context of adolescents' sport motivation. *Psychology of Sport and Exercise*, *8*, 195 – 217.

Bentler, P.M. (1992). On the fit of models to covariances and methodology to the Bulletin. *Psychological Bulletin*, *112*, 400 – 404.

Bentler, P.M., & Chou, C.P. (1987). Practical issues in structural equation modelling. *Sociological Methods and Research*, *16*, 78 – 117.

Berry, J.W., & Traindis, H.C. (2004). Cross-cultural psychology, Overview. In C.Spielberger (Ed.). *Encyclopaedia of Applied Psychology*. Vol. 1 (pp. 527 – 538). New York: Elsevier.

Biesta, G. (2010). Pragmatism and the philosophical foundations of mixed methods research. In A. Tashakkori & C. Teddlie (Eds.), *SAGE handbook of mixed methods in social and behavioural research* (2nd ed.,, pp. 95 – 117). Thousand Oaks, CA: Sage.

Black, S.J., & Weiss, M.R. (1992). The relationship among perceived coaching behaviours, perceptions of ability, and motivation in competitive age-group swimmers. *Journal of Sport & Exercise Psychology*, *14*, 309 – 325.

Blom, L.C., Visek, A.J., & Harris, B.S. (2013). Triangulation in youth sport: Healthy partnerships among parents, coaches and practitioners. *Journal of Sport Psychology in Action*, *4*, 86-96.

Bloom, B.S., (1985). *Developing talent in young people.* New York: Ballantine Books.

Bloor, M. (2001). Techniques of validation in qualitative research: A critical commentary. In R. M. Emerson (Ed.), *Contemporary field research* (pp. 383-396). Prospect Heights, IL: Waveland Press.

Bollen, K. A. (1989). Structural equations with latent variables. New York: Wiley.

Brenner, J.S. (2007). Overuse injuries, overtraining and burnout in child and adolescent athletes. *Pediatrics*, *119*, 1242 – 1245.

Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, *32*, 513 – 531.

Bronfenbrenner, U. (1979). *The Ecology of Human Development*. Cambridge, MA: Harvard University Press.

Bruner, M.W., Eys, M.A., Wilson, K.S., & Côté, J. (2014). Group cohesion and positive youth development in team sports. *Sport, Exercise & Performance Psychology*, *3*, 219 – 227.

Bruner, M., Munroe-Chandler, K., & Spink, K. (2008). Entry into elite sport: A preliminary investigation of the transition experience of rookie athletes. *Journal of Applied Sport Psychology*, *20*, 236 – 252.

Bryman, A. (2008). *Social Research Methods* (3rd ed). Oxford: Oxford University Press.

Byrne, B.M. (2006). *Structural equation modelling with EQS: Basic concepts, applications, and programming* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.

Centre for Reviews and Dissemination. (2009). *Systematic reviews: CRD's guidance for undertaking reviews in health care*. York: University of York

Cheung, G.W., & Lau, R.S. (2008). Testing mediation and suppression effects of latent variables: Bootstrapping with structural equation models. *Organisational Research Methods*, *11*, 296 – 325.

Christensen, M.K. (2009). "An eye for talent": Talent identification and the "practical sense" of top – level soccer coaches. *Sociology of Sport Journal*, *26*, 365 – 382.

Chamberlain, J.M., & Haaga, D.A.F. (2001). Unconditional self-acceptance and psychological health. *Journal of Rational-Emotive and Cognitive-Behaviour Therapy*, *19*, 163 – 176.

Christensen, M.K. (2009). "An Eye for Talent": Talent identification and the "practical sense" of top-level soccer coaches. *Sociology of Sport Journal*, *26*, 365 – 382.

Christensen, M.K., & Sørensen, J.K. (2009). Sport or school? Dreams and dilemmas for talented Danish football players. *European Physical Education Review*, *1*, 115 – 133.

Clark-Ibáñez, M. (2004). Framing the social world with photo-elicitation interviews. *American Behavioural Scientist, 47*, 1507-1527

Clarke, N.J., & Harwood, C.G. (2014). Parenting experiences in elite youth football: A phenomenological study. *Psychology of Sport and Exercise, 15,* 528 – 537.

Coffey, J.W., Hoffman, R.R., Cañas, A.J., & Ford, K.M. (2002). A concept map based knowledge modelling approach to expert knowledge sharing. *Proceedings of IKS 2002 – the IASTED International Conference on Information and Knowledge Sharing.* Retrieved 01/08/14 from http://www.ihmc.us/users/acanas/Publications/IKS2002/IKS.htm

Cohen, S., Kamarck, T., Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behaviour*, *24*, 385 – 396.

Collins, D., & MacNamara, Á. (2012). The rocky road to the top: Why talent needs trauma. *Sports Med*, *42*, 1 – 8.

Conroy, D.E., Willow, J.P., & Metzler, J.N. (2002). Multidimensional fear of failure measurement: The Performance Failure Appraisal Inventory. *Journal of Applied Sport Psychology*, *14*, 76 – 90.

Coolican, H. (2014). *Research Methods and Statistics in Psychology* (6th edition). London: Psychology Press.

Corbin, J. (2009). Taking an analytic journey. In J.M. Morse, P.N. Stern, J. Corbin, B.Bowers, K.Charmaz, & A.E. Clarke, *Developing grounded theory: The second generation* (pp. 35-53). Walnut Creek, CA: Left Coast Press.

Corbin, J., & Strauss, A. (2008). *Basics of Qualitative Research* (3rd. Ed.). London: Sage

Cosh, S., & Tulley, P.J. (2014). "All I have to do is pass": A discursive analysis of student athletes' talk about prioritising sport to the detriment of education to overcome stressors encountered in combining elite sport and tertiary education. *Psychology of Sport and Exercise*, *15*, 180 – 189.

Cossington, K. (2015, March). *FA girls' England talent pathway.* Presentation to English Football Association In-Service Training Event, Burton-Upon-Trent, UK.

Côté, J. (1999). The influence of the family in the development of talent in sports. *The Sport Psychologist*, *13*, 395 – 417.

Côté, J., Baker, J., & Abernathy, B. (2003). From play to practice: A developmental framework for the acquisition of expertise in team sport. In J.Starkes & K.A. Ericsson (Eds.), *The development of elite athletes:Recent advances in research on sport expertise* (pp. 184 – 202). Hoboken, NJ: Wiley.

Côté, J., Baker, J., & Abernathy, B. (2007). Practice and play in the development of sport expertise. In G. Tenenbaum & R.C. Eklund (Eds.), *Handbook of Sport Psychology* (3rd ed., pp. 184 - 202). New York: Wiley

Côté, J., Baker, J., Hay, J., Yardley, J., & Sedgwick, W. (1997, October). The coaching behaviour scale: past, present and future. *Paper presented at the meeting of the Canadian society for psychomotor learning and sport psychology, Niagara Falls, Ontario*.

Côté, J., Bruner, M., Erickson, K., Strachan, L., & Fraser-Thomas, J. (2010). Athlete development and coaching. In Lyle, J., & Cushion, C. (Eds.), *Sport Coaching: Professionalism and Practice.* Oxford: Elsevier.

Côté, J., & Fraser – Thomas, J. (2007). Youth involvement in sport. In P. Crocker (Ed.), Sport psychology: A Canadian perspective (pp. 270 – 298). Toronto: Pearson.

Côté, J., Lidor, R., & Hackfort, D. (2009). ISSP position stand: To sample or to specialize? Seven postulates about youth activities that lead to continued participation and elite performance. *International Journal of Sport and Exercise Psychology*, *9*, 7 – 17.

Creswell, J.W. (2013). *Qualitative Inquiry and Design: Choosing Among Five Approaches* (3rd ed.). London: Sage

Cresswell, J.W., & Plano Clark, V.L. (2011). *Designing and Conducting Mixed Methods Research* (2nd ed.). Thousand Oaks, CA: Sage.

Cropley, B., Miles, A., & Peel, J. (2012). Reflective practice: Value, issues, and developments within sports coaching. Sports Coach UK original research. Leeds, UK: SCUK

Curran, T., Hill, A.P., & Niemiec, C.P. (2013). A conditional process model of children's behavioural disaffection in sport based on self-determination theory. *Journal of Sport & Exercise Psychology*, *35*, 30-43.

Cushion, C., Ford, P.R., & Williams, A.M. (2012). Coach behaviours and practice structures in youth soccer: Implications for talent development. *Journal of Sports Sciences*, *30*, 1631-1641.

Cushion, C., Harvey, S., Muir, B., & Nelson, L. (2012). Developing the Coach Analysis and Integration System (CAIS): Establishing validity and reliability of a computerised systematic observation system. *Journal of Sports Sciences*, *30*, 201 – 216.

Darling, N., & Toyokawa, T. (1997). *Construction and validation of the Parenting Style Inventory II.* The Pennsylvania State University: Internal publication.

Dawney, D.B., Condron, D.J., & Yucel, D. (2013). Number of siblings and social skills revisited among American fifth graders. *Journal of Family Issues.* Retrieved from: *http://jfi.sagepub.com/content/early/2013/11/06/0192513X13507569.full.pdf+html*

De Haan, E. (2011). Back to basics: How the discovery of transference is relevant for coaches and consultants today. *International Coaching Psychology Review*, *6*, 180 – 193.

Delgado – Romero, E., Galván, N., Maschino, P., & Rowland, M. (2005). Race and ethnicity in empirical counselling and counselling psychology research. *The Counseling Psychologist*, *33*, 419 – 448.

Denzin, N.K. (1989). *The Research Act: A Theoretical Introduction to Sociological Methods* (3rd ed.). Englewood Cliffs, NJ: Prentice Hall.

Denzin, N.K. (1989). *Interpretive interactionism.* Newbury Park, CA: Sage.

Denzin, N.K., & Lincoln, Y. (2003). *The Landscape of Qualitative Research: Theories and Issues* (2nd ed.). London: Sage.

Dewey, J. (2008). How we think. In J.Boydston (Ed.), *The middle works of John Dewey, 1899 – 1924* (Vol. 11, pp. 105 – 353). Carbondale: Southern Illinois University Press.

Duda, J.L., & Nicholls, J.G. (1992). Dimensions of achievement motivation in schoolwork and sport. *Journal of Educational Psychology*, *84*, 290 - 299

Eisenkopf, G. (2010). Peer effects, motivation and learning. *Economics of Education Review*, *3*, 364 – 374.

Eisner, E. (1991). *The enlightened eye.* New York: Macmillan Publishing Company.

Elliot, R., & Weedon, G. (2010). Foreign players in the English Premier League: 'Feet-drain' or 'feet-exchange'. *International Review for the Sociology of Sport*, 1-15.

Eppler, M.J. (2006). A comparison between concept maps, mind maps, conceptual diagrams, and visual metaphors as complementary tools for knowledge communication and sharing. *Information Visualization*, *5*, 202 – 210.

Erickson, K., Bruner, M., MacDonald, D., & Côté, J. (2008). Gaining insight into actual and preferred sources of coaching knowledge. *International Journal of Sport Science and Coaching*, *3*, 527-538.

Erickson, K., & Stull, D. (1998). *Doing Team Ethnography: Warnings and Advice.* Thousand Oaks, CA: Sage

Ericsson, K.A., Krampe, R.T., & Tesch-Römer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, *100*, 363 – 406.

European Commission (2012). *EU guidelines on dual careers of athletes: Recommended policy actions in support of dual careers in high-performance sport.* Retrieved 15/03/2015 from http://ec.europa.eu/sport/policy/societal_role/dual_careers_en.htm

Eys, M.A., Loughead, T.M., Bray, S.R., & Carron, A.V. (2009). Development of a cohesion questionnaire for the youth: the Youth Sport Environment Questionnaire. *Journal of Sport & Exercise Psychology*, *31*, 390 – 408.

Fangen, K., & Lynnebakke, B. (2014). Navigating ethnic stigmatisation in the educational setting: Coping strategies of young immigrants and descendants of immigrants in Norway. *Social Inclusion*, *2*, 47 – 59.

Fédération Internationale de Football Association. (2014). Women's football development programmes and guidelines 2015-2018. Retrieved from http://www.fifa.com/mm/document/footballdevelopment/women/01/57/10/97/women sfootballdevprogr_e.pdf

Fédération Internationale de Football Association. (2015a). Key figures from the FIFA Womens's World Cup, Canada. Retrieved 09 July. 2015, from http://www.fifa.com/womensworldcup/news/y=2015/m=7/news=key-figures-from-the-fifa-women-s-world-cup-canada-2015tm-2661648.html

Fédération Internationale de Football Association. (2015b). *World cup smashes TV records in US, Japan.* Retrieved 09 July, 2015, from http://www.fifa.com/womensworldcup/news/y=2015/m=7/news=world-cup-final-smashes-tv-records-in-us-japan-2661775.html

Feilzer, M.Y. (2010). Doing mixed-methods research pragmatically: Implications for the rediscovery of pragmatism as a research paradigm. *Journal of Mixed Methods Research*, *4,* 6 – 16.

Folkman, S., & Lazarus, R.S. (1985). If it changes it must be a process: Study of emotion and coping during three stages of a college exam. *Journal of Personality and Social Psychology*, *48*, 150 – 170.

Football Association (2010). *Disability Football Strategy*. Retrieved 01/03/14 from http://www.thefa.com/~/media/files/pdf/thefa/disabilitystrategy.ashx/DisabilityStrategy.pdf

Football Association. (2012). 'Game Changer'. Retrieved from http://www.thefa.com/news/2012/oct/game-changer-womens-football

Football Association (2014). England DNA philosophy unveiled at St. George's Park Retrieved 23/12/14from http://www.thefa.com/news/england/2014/dec/england-dna-launch

Ford, P.R., Carling, C., Garces, M., Marques, M., Miguel, C., Farrant, A., et al. (2012). The developmental activities of elite soccer players aged under-16 years from Brazil, England, France, Ghana, Mexico, Portugal and Sweden. *Journal of Sports Sciences*, *30*, 1653 – 1663.

Ford, P.R., Low, J., McRobert, A.P., & Williams, A.M. (2010). Developmental activities that contribute to high or low performance by elite cricket batters when recognizing type of delivery from bowlers' advanced postural cues. *Journal of Sport & Exercise Psychology, 32,* 638 – 654.

Ford, P.R., Ward, P., Hodges, N.J., & Williams, A.M. (2009). The role of deliberate practice and play in career progression in sport: The early engagement hypothesis. *High Ability Studies*, *20*, 65 – 75.

Ford, P.R., & Williams, A.M. (2008). The effect of participation in Gaelic football on the development of Irish professional soccer players. *Journal of Sport & Exercise Psychology*, *30***,** 709 – 722.

Ford, P.R., & Williams, A.M. (2012). The developmental activities engaged in by elite youth soccer players who progressed to professional status compared to those who did not. *Psychology of Sport and Exercise*, *13*, 349 – 352.

Ford, P.R., Yates, I., & Williams, A.M. (2010). An analysis of practice activities and instructional behaviours used by youth soccer coaches during practice: Exploring the link between science and application. *Journal of Sports Sciences*, *28,* 483 – 495.

Freitas, S., Dias, C., & Fonseca, A. (2013). Psychological skills training applied to soccer: A systematic review based on research methodologies. *Review of European Studies*, *5*, 18 – 29.

Frost, R.O., Marten, Lahart, C., Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research*, *14*, 449 – 468.

Gabbett, T.J., & Mulvey, M.J. (2008). Time-motion analysis of small-sided training games and competition in elite women soccer players. *Journal of Strength and Conditioning Research, 22*, 543 – 552.

Gage, N.L. (1989). The paradigm wars and their aftermath: A "historical" sketch of research on teaching since 1989. *Educational Researcher*, *18*, 4 – 10.

Gearity, B.T. & Murray, M.A. (2011). Athletes' experiences of the psychological effects of poor coaching. *Psychology of Sport and Exercise*, *12*, 213 – 221.

Gibson, O. (2012, July 18th). Drop in school sport support blamed on funding cuts. *The Guardian.*

Gill, D.L. (2001). Feminist sport psychology: A guide for our journey. *The Sport Psychologist*, *15*, 363 – 372.

Gershgoren, L., Tenenbaum, G., Gershgoren, A., & Eklund, R.C. (2011). The effect of parental feedback on young athletes' perceived motivational climate, goal involvement, goal orientation, and performance. *Psychology of Sport and Exercise*, *12*, 481 – 489.

Glasziou, P., Vandenbroucke, J., & Chalmers, I. (2004). Assessing the quality of research. *British Medical Journal*, *328*, 39 – 41.

Gledhill, A., & Harwood, C. (2014). Developmental experiences of elite female youth soccer players. *International Journal of Sport and Exercise Psychology*, 12, 150 – 165.

Gledhill, A., & Harwood, C. (2015). A holistic perspective on career development in UK female soccer players: A negative case analysis. *Psychology of Sport and Exercise*, *21*, 65 – 77.

Glen, S.D., & Horn, T.S. (1993). Psychological and personal predictors of leadership behaviour in female soccer athletes. *Journal of Applied Sport Psychology*, *5*, 17 – 34.

Green, J.C., & Carcerelli, V.J. (Eds.). (1997). *New directions for evaluation, number 74: Advances in mixed-method evaluation, the challenges and benefits of integrating diverse paradigms.* San Francisco: Jossey-Bass.

Greene, J.C. (2007). *Mixing methods in social inquiry*. San Francisco: Jossey-Bass.

Greene, J.C., & Hall, J. (2010). Dialectics and pragmatism: Being of consequence. In A. Tashakkori & C. Teddlie (Eds.), *SAGE handbook of mixed methods in social and behavioural research* (2nd ed.,, pp. 119 – 143). Thousand Oaks, CA: Sage.

Greenfield, P.M., & Keller, H. (2004). Cultural psychology. In C.Spielberger (Ed.). *Encyclopaedia of Applied Psychology*. Vol. 1 (pp. 545 – 554). New York: Elsevier.

Goldberg, A. D., & Chandler, T. J. L. (1991). Sport participation among adolescent girls: Role conflict or multiple roles? *Sex Roles, 25,* 213-224.

Gotwals, J.K., & Dunn, J.G.H. (2009). A multi-method multi-analytic approach to establishing internal construct validity evidence: The Sport Multidimensional Perfectionism Scale – 2. *Measurement in Physical Education and Exercise Science*, *13*, 71 – 92.

Gough, D., Oliver, S., & Thomas, J. (2012). *An Introduction to Systematic Reviews.* Thousand Oaks, CA: Sage.

Gould, D., & Carson, S. (2008). Life skills development through sport: Current status and future directions. *International Review of Sport and Exercise Psychology*, *1*, 58 – 78.

Gould, D., & Carson, S. (2010). The relationship between perceived coaching behaviours and developmental benefits of high school sports participation. *The Hellenic Journal of Psychology*, *7*, 298 – 314.

Grix, J. (2002). Introducing students to generic terminology of social research. *Politics*, *22*, 405 – 422.

Guadagnoli, M.A., & Lee, T.D. (2004). Challenge point: A framework for conceptualizing the effects of various practice conditions in motor learning. *Journal of Motor Behaviour*, *36*, 212-224

Guba, E., & Lincol, Y. (1994). Competing paradigms in qualitative research. In N.K. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (1st edition) (pp. 105 – 117). London: Sage.

Hackfort, D. (2006). A conceptual framework and fundamental issues investigating the development of peak performance in sports. In D. Hackfort & G. Tenenbaum (Eds.), *Essential processes for attaining peak performance*, (pp. 10 – 25). Oxford: Meyer & Meyer.

Hanson, D.M., & Larson, R. (2005). *The Youth Sport Experiences Survey*. Unpublished manuscript. University of Illinois at Urbana-Champaign. Retrieved from http://youthdev.illinois.edu/?page_id=11

Harris, N. (2013). *Foreign players at record levels across European football*. Retrieved from http://www.sportingintelligence.com/2013/01/21/new-research-foreign-players-at-record-levels-across-european-football-210102/

Harter, S. (1985). *Manual for the Self-Perception Profile for Children*. Denver, CO: University of Denver.

Harter, S. (1988). *Manual for the Self-Perception Profile for Adolescents.* Denver, CO: University of Denver.

Harwood, C. (2008). Developmental consulting in a professional football academy: The 5Cs coaching efficacy program. *The Sport Psychologist*, *22*, 109 – 133.

Harwood, C., & Anderson, R. (2015). *Coaching Psychological Skills in Youth Football*. Oakamoor: Benion Kearny.

Harwood, C., Drew, A., & Knight, C. J. (2010). Parental stressors in professional youth football academies: A qualitative investigation of specialising stage parents. *Qualitative Research in Sport and Exercise*, *2*, 39 – 55.

Harwood, C.G., & Knight, C.J. (2015). Parenting in youth sport: A position paper on parenting expertise. *Psychology of Sport and Exercise*, *16*, 24 – 35.

Haugaasen, M., & Jordet, G. (2012). Developing football expertise: A football-specific review. *International Review of Sport and Exercise Psychology*, *5*, 177 – 201.

Herl, H.E., O'Neil, H.F., Jr., Chung, G.K.W.K., Bianchi, C., Wang, S., Mayer, R., et al. (1999). *Final report for validation of problem-solving measures.* CSE Technical Report #501. Retrieved from http://www.cse.ucla.edu/products/Reports/TECH501.pdf

Hewitt, P.L., & Flett, G.L. (1991). Perfectionism in the self and social contexts: Conceptualization, assessment, and association with psychopathology. *Journal of Personality and Social Psychology*, *60*, 456 – 470.

Hill, A.P., Hall, H.K., Appleton, P.R., & Kozub, S.A. (2008). Perfectionism and burnout in junior elite soccer players: The mediating influence of unconditional self-acceptance. *Psychology of Sport and Exercise*, *9*, 630 – 644.

Hodge, K., Lonsdale, C., & Jackson, S.A. (2009). Athlete engagement in elite sport: An exploratory investigation of antecedents and consequences. *The Sport Psychologist*, *23*, 186 – 202.

Hollenbeck, J.R., O'Leary, A.M., Klein, H.J., & Wright, P.M. (1989). Investigation of the construct validity of a self-report measure of goal commitment. *The Journal of Applied Psychology*, *74*, 951 – 956.

Holt, J.E., Kinchin, G., & Clarke, G. (2012). Effects of peer-assessed feedback, goal setting and a group contingency on performance and learning by 10-12-year-old soccer players. *Physical Education and Sport Pedagogy*, *17*, 231 – 250.

Holt, N.L., & Dunn, J.G.H. (2004). Toward a grounded theory of the psychosocial competencies and environmental conditions associated with football success. *Journal of applied sport psychology*, *16*, 199 – 219.

Holt, N.L., & Mitchell, T. (2006). Talent development in English professional football. *International journal of sport psychology*, *37*, 77 – 98.

Holt, N.L., & Morley, D. (2004). Gender differences in psychosocial factors associated with athletic success during childhood. *The Sport Psychologist*, *18*, 138 – 153.

Holt, N.L., & Tamminen, K.L. (2010a). Improving grounded theory research in sport and exercise psychology: Further reflections as a response to Mike Weed. *Psychology of sport and exercise*, *11*, 405-413

Holt, N.L., & Tamminen, K.L. (2010b). Moving forward with grounded theory in sport and exercise psychology. *Psychology of sport and exercise*, *11*, 419-422

Holt, N.L., Tamminen, K.A., Black, D.E., Mandigo, J.L. & Fox, K.R. (2009). Youth sport parenting styles and practices. *Journal of Sport & Exercise Psychology*, *31*, 37 – 59.

Hong, F. (2003). Football: A sport for women. *Soccer and Society*, *4*, 268 – 270.

Hong, E., & O'Neil, H.F., Jr. (2001). Construct validation of a trait self-regulation model. *International Journal of Psychology*, *36*, 186 – 194.

Howard, B.C., McGee, S., Shia, R., & Hong, N.S. (2000). Metacognitive self-regulation and problem-solving: Expanding the theory base through factor analysis. Paper presented at *the Annual Meeting of the American Educational Research Association*.

Huff, A.S. (2009). *Designing Research for Publication*. Los Angeles, CA: Sage.

Jonker, L., Elferink-Gemser, M.T., & Visscher, C. (2010). Differences in self-regulatory skills among talented athletes: The significance of competitive level and type of sport. *Journal of Sports Sciences*, *28*, 901 – 908.

Keegan, R., Spray, C.M., Harwood, C.G., & Lavallee, D. (2010). The 'motivational atmosphere' in youth sport: Coach, parent and peer influences on sport motivation in specializing sports participants. *Journal of Applied Sport Psychology*, *22*, 87 – 105.

Kinderman, P., Schwannauer, M., Pontin, E., & Tai, S. (2013). Psychological Processes Mediate the Impact of Familial Risk, Social Circumstances and Life Events on Mental Health. PLoS ONE 8(10): e76564. doi:10.1371/journal.pone.0076564

Kline, R.B. (2010). *Principles and practices of structural equation modelling* (3rd ed.). New York: Guildford Press.

Konter, E. (2010). Nonverbal intelligence of players according to their level of play. *Procedia Social and Behavioural Sciences*, *2*, 1114 – 1120.

Konter, E., & Yurdabakan, I. (2010). Validity and reliability of the Test of Nonverbal Intelligence – 2 for soccer players in Turkey. *International Journal of Sport Science and Engineering*, *4*, 3 – 14.

Krosnick, J.A. (1999). Survey research. *Annual Review of Psychology*, *50*, 537 – 567.

LaGuardia, J.G., Ryan, R.M., Couchman, C.E., & Deci, E.L. (2000). Within-person variation in security of attachment: A self-determination theory perspective on attachment, need fulfillment, and wellbeing. *Journal of Personality and Social Psychology*, *79*, 367 – 384.

Larsen, C.H., Alfermann, D., Henriksen, K., & Christensen, M.K. (2013). Successful talent development in soccer: The characteristics of the environment. *Sport, Exercise, & Performance Psychology*, *2*, 190 – 206.

Larsen, C.H., Alfermann, D., & Christensen, M.K. (2012). Psychosocial skills in a youth soccer academy. *Sport Science Review*, *21*, 51 – 73.

Larsen, C.H., Alfermann, D., Henriksen, K., & Christensen, M.K. (2013). Successful talent development in soccer: The characteristics of the environment. *Sport, Exercise and Performance Psychology*, *2*, 190 – 206.

Larsen, C.H., Alfermann, D., Henriksen, K., & Christensen, M.K. (2014). Preparing footballers for the next step: An intervention program from an ecological perspective. *The Sport Psychologist*, *28*, 91 – 102.

Lincoln, Y. (2010). What a long strange trip its been…: Twenty-five years of qualitative and new paradigm research. *Qualitative Inquiry*, *16*, 3 – 9.

Lloyd Jones, M. (2004). Application of systematic review methods to qualitative research: Practical issues. *Journal of Advanced Nursing*, *48*, 271 – 278.

MacBeth, J., & Magee, J. (2006). 'Captain England? Maybe one day I will': Career paths of elite partially sighted footballers. *Soccer and Society*, *3*, 444 – 462.

MacNamara, Á., Button, A., & Collins, D. (2010a). The role of psychological characteristics in facilitating the pathway to elite performance. Part 1: Identifying mental skills and behaviours. *The Sport Psychologist*, *24*, 52 – 73.

MacNamara, Á., Button, A., & Collins, D. (2010b). The role of psychological characteristics in facilitating the pathway to elite performance. Part 2: Examining environmental and stage-related differences in skills and behaviours. *The Sport Psychologist*, *24*, 74 – 96.

Martikainen, P., Bartley, M., & Lahelma, E. Psychosocial determinants of health in social epidemiology. *International Journal of Epidemiology*, *31*, 1091 – 1093.

Martindale, R.J.J., Collins, D., Douglas, C., & Whike, A. (2012). Examining the ecological validity of the talent development environment questionnaire. *Journal of Sports Sciences*, *31*, 41 – 47.

Martindale, R.J.J, Collins, D., Wang, J.C., McNeill, M., Lee, K.S., Sproule, J., & Westbury, T. (2010). Development of the talent development environment questionnaire. *Journal of Sports Sciences*, *28*, 1209 – 1221.

McAuley, E., Duncan, T., & Tammen, V.V. (1989). Psychometric properties of the intrinsic motivation inventory in a competitive sport setting: A confirmatory factor analysis. *Research Quarterly for Exercise and Sport*, *60*, 48 – 58.

McCormack, C., & Walseth, K. (2013). Combining elite women's soccer and education: Norway and the NCAA. *Soccer & Society, 14,* 887- 897

McHale, S.M., Updegraff, K.A., & Whiteman, S.D. (2012). Sibling relationships and influences in childhood and adolescence. *Journal of Marriage and Family*, *74*, 913 – 930.

Meade, M. O., and Richardson, W.S. (1997). Selecting and appraising studies for systematic review. *Annals of Internal Medicine*, *127*, 531 – 537.

Mills, A., Butt, J., Maynard, I., & Harwood, C. (2012). Identifying factors perceived to influence the development of elite youth football academy players. *Journal of Sports Sciences*, *30,* 1593-1604.

Mills, A., Butt, J., Maynard, I., & Harwood, C. (2014a). Toward an understanding of optimal development environments within elite English soccer academies. *The Sport Psychologist*, *28*, 137 – 150

Mills, A., Butt, J., Maynard, I., & Harwood, C. (2014b). Examining the development environments of elite English football academies: The players' perspective. *International Journal of Sports Science and Coaching*, *9*, 1457 – 1472

Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). *P*referred *R*eporting *I*tems for *S*ystematic Reviews and *M*eta-*A*nalyses: The PRISMA Statement. *PLoS Med* 6(6): e1000097. doi:10.1371/journal.pmed1000097

Morgan, D.L. (2007). Paradigms lost and pragmatism (re)gained: Methodological implications of combining qualitative and quantitative methods. *Journal of Mixed Methods Research*, *1*, 48 – 76.

Morgan, D.L. (2014). Pragmatism as a paradigm for social research. *Qualitative Inquiry*. DOI: 10.1177/1077800413513733

Mouratidis, A., Lens, W., & Vansteenkiste, M. (2010). How you provide corrective feedback makes a difference: The motivating role of communicating in an autonomy-supporting way. *Journal of Sport and Exercise Psychology*, *32*, 619 – 637.

Morley, D., Morgan, G., McKenna, J., & Nicholls, A.R. (2014). Developmental contexts and features of elite academy football players: Coach and player perspectives. *International Journal of Sport Science and Coaching*, 9, 217-232

Morse, J. M. (1995). The significance of saturation. *Qualitative Health Research*, *5*, 147 -149.

Newton, M., Duda, J.L., & Yin, Z. (2000). Examination of the psychometric properties of the perceived motivational climate in sport questionnaire-2 in a sample of female athletes. *Journal of Sports Sciences*, *18*, 275 – 290.

Ng, J.Y.Y., Lonsdale, C., & Hodge, K. (2011). The Basic Needs Satisfaction in Sport Scale (BNSSS): Instrument Development and initial validity evidence. *Psychology of Sport and Exercise*, *12*, 257 – 264.

Novak, J.D. (1980). Learning theory applied to the biology classroom. *The American Biology Teacher*, *42*, 280 – 285.

Novak, J.D., & Cañas, A.J. (2007). Theoretical origins of concept maps, how to construct them, and uses in education. *Reflecting Education*, *3*, 29-42

Ommundsen, Y., Roberts, G.C., Lemyre, P-N., & Miller, B.W. (2006). Parental and coach support or pressure on psychosocial outcomes of paediatric athletes in soccer. *Clinical Journal of Sports Medicine*, *16*, 522-526.

Ommundsen, Y., & Valgum, P. (1991). The influence of low perceived soccer and social competence on later dropout from sport: A prospective cohort study of young boys. *Scandanavian Journal of Science and Medicine in Sports*, *1*, 180 – 188.

O'Neill, M., Allen, B., & Calder, A.M. (2013). Pressure to perform: An interview study of Australian school-age athletes' perceptions of balancing their schools and sporting lives. *Performance Enhancement and Health*, *2*, 87 – 93.

Pain, M., & Harwood, C. (2007). The performance environment of the England youth soccer teams. *Journal of Sports Sciences*, *25*, 1307 – 1324.

Pain, M.A, & Harwood, C.G. (2004). Knowledge and perceptions of sport psychology within English soccer. *Journal of Sports Sciences*, *22*, 813 – 826.

Pain, M., & Harwood, C. (2013). Stress, coping, and the qualities of elite players. In A.M. Williams (Ed.), *Science and Soccer: Developing Elite Performers* (3rd ed). (pp. 154 – 169). Oxon, Abingdon: Routledge.

Patton, M.Q. (2002). *Qualitative evaluation and research methods* (3rd ed). Newbury Park, CA: Sage.

Pelletier, L.G., Fortier, M.S., Vallerand, R.J., Tuson, K.M., Brière, N.M., Blais, M.R. (1995). Toward a new measure of intrinsic motivation, extrinsic motivation, and amotivation in sports: The sport motivation scale (SMS). *Journal of Sport & Exercise Psychology*, *17*, 35 – 53.

Pelletier, J.W., Hay, A., & Drago, W. (2006). Reflecting on reflection: Scale extension and a comparison of undergraduate business students in the United States and the United Kingdom. *Journal of Marketing Education*, *28*, 5 – 16.

Plummel, B., Harwood, C., & Lavallee, D. (2008). Jumping to the next level: A qualitative examination od within-career transition in adolescent event riders. *Psychology of Sport and Exercise, 9,* 427 – 447.

Pluye P, Gagnon MP, Griffiths F & Johnson-Lafleur J (2009). A scoring system for appraising mixed methods research, and concomitantly appraising qualitative, quantitative and mixed methods primary studies in mixed studies reviews. *International Journal of Nursing Studies*, 46, 529-546.

Pope, C., Mays, N., & Popay, J. (2007). *Synthesising qualitative and quantitative health research: A guide to methods*. Maidenhead, UK: Open University Press.

Posner, M.I., Rothbert, M.K., & Tang, Y. (2013). Developing self-regulation in early childhood. *Trends in Neuroscience and Education*, *2*, 107 – 110.

Preacher, K.J., & Kelley, K. (2011). Effect size measures for mediation models: Quantitative strategies for communicating indirect effects. *Psychological Methods*, *16*, 93 – 115.

Quested, E., Ntoumains, N., Vildarch, C., Haug, E., Ommundsen, Y., Van Hoye, A., ... Duda, J.L. (2013). Intentions to drop-out of youth soccer: A test of basic needs theory amng European youth from five countries. *International Journal of Sport and Exercise Psychology*, *11*, 1-13

Raedeke, T.D., & Smith, A.L. (2001). Development and preliminary validation of an athlete burnout measure. *Journal of Sport and Exercise Psychology*, *23*, 281 – 306.

Rauscher, L., & Greenfield, B. (2009). Advancements in contemporary physical therapy research: Use of mixed methods. *Physical Therapy*, *89*, 1 – 9.

Reeves, C.W., Nicholls, A.R., & McKenna, J. (2009). Stressors and coping strategies among early and mid-adolescent premier league academy soccer players: Differences according to age. *Journal of Applied Sport Psychology*, *21*, 31 – 48.

Reinboth, M., Duda, J.L., & Ntoumanis, N. (2004). Dimensions of coaching behaviour, need satisfaction, and the psychological and physical welfare of young athletes. *Motivation and Emotion*, *28*, 297 – 313.

Richardson, D., Relvas, H., & Littlewood, M. (2013). Sociological and cultural influences on player development. In A.M. Williams (Ed.), *Science and soccer: Developing elite performers* (3rd ed., pp. 139 – 153). London: Routledge.

Richer, S.F., & Vallerand, R.J. (1998). Construction et validation de l'Échelle du sentiment d'appartance sociale. *Revue Européenne de Psychologie Appliquée*, *48*, 129 – 137.

Roberts, G.C., Treasure, D.C., & Balague, G. (1998). Motivation in sport: The development and validation of the Perception of Success Questionnaire. *Journal of Sports Sciences*, *16*, 337 – 347.

Roca, A., Williams, A.M., & Ford, P.R. (2012). Developmental activities and the acquisition of superior anticipation and decision making in soccer players. *Journal of Sports Sciences*, *30*, 1643 – 1652.

Roccas, S. & Sagiv, L. (2010). Personal values and behaviour: Taking the cultural context into account. *Social and Personality Psychology*, *4*, 30-41.

Roderick, M. (2006). *The work of professional football: A labour of love?* London: Routledge.

Rubin, H.J., & Rubin, I.S. (2005). *Qualitative interviewing: The art of hearing data* (2nd ed.) Thousand Oaks, CA: Sage.

Ryba, T.V., Stambulova, N.B., Si, G., & Schinke, R.T. (2013). ISSP position Stand: Culturally competent research and practice in sport and exercise psychology. *International Journal of Sport and Exercise Psychology*, *11*, 123 – 142.

Sagar, S.S., Busch, B.K., & Jowett, S. (2010). Success and failure, fear of failure and coping responses of adolescent academy football players. *Journal of Applied Sport Psychology*, *17*, 326 – 332.

Sapieja, K.M., Dunn, J.G.H., & Holt, N.L. (2011). Perfectionism and perceptions of parenting styles in male youth soccer. *Journal of Sport & Exercise Psychology*, *33*, 20 – 39.

Sarrazin, P., Vallerand, R., Guillet, E., Pelletier, L., & Cury, F. (2002). Motivation and dropout in female handballers: A 21-month prospective study. *European Journal of Social Psychology*, *32*, 395 – 418.

Shaw, J., Connelly, D., & Zecevic, A. (2010). Pragmatism in practice: Mixed methods research for physiotherapy. *Physiotherapy Theory and Practice*, *26*, 510 – 518.

Shrout, P.E., & Fleiss, J.L. (1979). Intraclass correlation: Uses in inter-rater reliability. *Psychological Bulletin*, *86*, 420 – 428.

Scanlan, T.K., Carpenter, P., Schmdit, G., Simons, J., & Keeler, B. (1993). An introduction to the sport commitment model. *Journal of Sport & Exercise Psychology*, *15*, 1 – 15.

Schwarzer, R., & Jerusalem, M. (1995). Generalised self-efficacy scale. In J. Weinman, S. Wright, & M. Johnston (Eds.), *Measures in Health Psychology: A user's Portfolio. Causal and Control Beliefs* (pp. 35 – 37). Windsor, UK: NFER-NELSON.

Schwartz, S. (2006). Basic human values: Theory, measurement, and applications. *Revue francaise de Sociologie*, *47*, 929-968.

Scott, D., & Andersson, H. Women's soccer. In A.M. Williams (Ed.). *Science and Soccer: Developing Elite Performers* (pp. 237-258). Abingdon, Oxon: Routledge.

Semrud-Clikeman, M. (2007). *Social competence in children*. New York, NY: Springer Science + Business Media

Singer, R.N., & Janelle, C.M. (1999). Determining sport expertise: From genes to supremes. *International Journal of Sport Psychology*, *30*, 117 – 150.

Sivo, S.A., Fan, X., Wita, E.L., & Willse, J.J. (2006). The search for "optimal" cut-off properties: Fit index criteria in structural equation modeling. *Journal of Experimental Education*, *74*, 267 – 288.

Skinner, E.A., Kindermann, T.A., & Furrer, C.J. (2009). A motivational perspective on engagement and disaffection: Conceptualization and assessment of children's behavioural and emotional participation in academic activities in the classroom. *Educational and Psychological Measurement*, *69*, 493 – 525.

Smith, B., Sarkes, A.C., Phoenix, C., & Kirby, J. (2012). Qualitative research in physical therapy: A critical discussion on mixed-method research. *Physical Therapy Review*, *17*, 374 – 381.

Smith, J. (1989). *The nature of social and educational inquiry: Empiricism versus mixed methods and validity in qualitative research interpretation.* Norwood, NJ: Ablex Publishing Corporation.

Smith, M.F. (2010). *Research Methods in Sport.* Exeter: Learning Matters Ltd.

Smith, R.E., Smoll, F.L., & Hunt, E. (1977). A system for the behavioural assessment of athletic coaches. *Research Quarterly. American Alliance for Health, Physical Education and Recreation*, *48*, 401 – 407.

Sparkes, A.C., & Smith, B. (2013). *Qualitative Research Methods in Sport, Exercise and Health: From Process to Product.* Abingdon, Oxon: Routledge.

Speirs Naumeister, K.L. (2004). Factors influencing the development of perfectionism in gifted college students. *Gifted Child Quarterly*, *48*, 259 – 275.

Spence, J.T., & Helmreich, R. (1978). *Masculinity and femininity: Their psychological dimensions, correlates, and antecedents.* Austin, TX: University of Texas.

Stambulova, N. (1994). Developmental sports career investigations in Russia: A post-perestroika analysis. *The Sport Psychologist*, *8*, 221 – 237.

Stambulova, N. (2003). Symptoms of a crisis-transition: A grounded theory study. *Svensk Idrottpsykologisk Förenings Årsbook, 2003,* 97-109.

Stambulova, N.B. (2009). Talent development in sport: A career transitions perspective. In E. Tsung-Min Hung, R. Lidor, & D. Hackfort (Eds.). *Psychology of Excellence* (pp. 63-74). Morgantown, WV: Fitness Information Technology.

Stambulova, N.B., & Alfermann, D. (2009). Putting culture into context: Cultural and cross-cultural perspectives in career development and transition research and practice. *International Journal of Sport and Exercise Psychology*, 7, 292 – 308.

Stambulova, N., Alfermann, D., Statler, T., & Côté, J. (2009). ISSP position stand: Career development and transitions of athletes. *International Journal of Sport and Exercise Psychology*, 7, 395 – 412.

Stambulova, N., Engström, C., Franck, A., Linnér, L., & Lindahl, K. (2014). Searching for an optimal balance: Dual career experiences of Swedish adolescent athletes. *Psychology of Sport and Exercise*, *xxx*, 1-11.

Stambulova, N., Franck, A., & Weibulkl, F. (2012). Assessment of transition from junior to senior sports in Swedish athletes. *International Journal of Sport & Exercise Psychology*, 10, 1-17.

Stambulova, N.B., & Ryba, T.V. (2014). A critical review of career research and assistance through a cultural lens: Towards a cultural praxis of athletes' careers. *International Review of Sport and Exercise Psychology*, 7, 1 – 17.

Stambulova, N., & Wylleman, P. (2014). Athletes' career development and transitions. In A. Papaioannou, & D. Hackfort (Eds.). *Routledge companion to sport and exercise psychology* (pp. 605-621). London: Routledge.

Standage, M., Duda, J.L., & Ntoumains, N. (2005). A test of self-determination theory in school physical education. *British Journal of Educational Psychology*, 75, 411 – 433.

Stebbings, J., Taylor, I.M., & Spray, C. (2011). Antecedents of perceived coach autonomy supportive and controlling behaviours: Coach psychological need satisfaction and well-being. *Journal of Sport & Exercise Psychology*, 33, 255 – 272.

Stodter, A., & Cushion, C. (2014). Coaches' learning and education: A case study of cultures in conflict. *Sports Coaching Review*, 3, 63 – 79.

Stoszkowski, J., & Collins, D. (2015). Sources, topics and use of knowledge by coaches. *Journal of Sports Sciences*. DOI: 10.1080/02640414.2015.1072279

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Newbury Park, CA: Sage.

Stride, A., & Fitzgerald, H.F. (2011). Girls with learning disabilities and 'football on the brain'. *Soccer & Society*, 12, 457 – 470.

Swann, C., Keegan, R., Piggott, D., & Crust, L. (2012). A systematic review of the experience, occurrence, and controllability of flow states in elite sport. *Psychology of Sport and Exercise, 13*, 807-819

Tabachnick, B.G., & Fidell, L.S. (2007). *Using multivariate statistics* (5th ed.). Boston: Allyn and Bacon.

Tamminen, K.A., & Holt, N.L. (2010). Improving grounded theory research in sport and exercise psychology: Further reflections as a response to Mike Weed. *Psychology of Sport and Exercise, 11,* 405 – 413.

Toering, T.T., Elferink – Gemser, M.T., Jordet, G., & Visscher, C. (2009). Self – regulation and performance level of elite and non – elite youth soccer players. *Journal of Sports Sciences*, *27*, 1509 – 1517

Toering, T., Elferink-Gemser, M.T., Jonker, L., van Heuvelen, M.J.G., & Visscher, C. (2012). Measuring self-regulation in a learning context: Reliability and validity of the Self-Regulation of Learning Self-Report Scale (SRL-SRS). *International Journal of Sport and Exercise Psychology*, *10*, 24 – 38.

Toering, T., Eleferink-Gemser, M., Jordet, G., Jorna, C., Pepping, J-G., Visscher, C. (2011). Self-regulation of practice behaviour among elite female youth soccer players: An exploratory observation study. *Journal of Applied Sport Psychology*, *23*, 110 – 128.

Tracy, S.J. (2010). Qualitative quality: Eight 'big-tent' criteria for excellent qualitative research, *Qualitative Inquiry*, *16*, 837-851.

Ullrich – French, S., & Smith, A.L. (2006). Perceptions of relationships with parents and peers in youth sport: Independent and combined prediction of motivational outcomes. *Psychology of Sport and Exercise*, *7*, 193 – 214.

Ullrich – French, S., & Smith, A.L. (2009). Social and motivational predictors of continued youth sport participation. *Psychology of Sport and Exercise*, *10*, 87 – 95.

Vaeyens, R., Lenoir, M., Williams, A.M., Mazyn, L., & Philippaerts, R.M. (2007a). The effects of task constraint on visual search behaviour and decision making skill in youth soccer players. *Journal of Sport & Exercise Psychology*, *29*, 147 – 169.

Vaeyens, R., Lenoir, M., Williams, A.M., & Philippaerts, R.M. (2007b). Mechanisms underpinning successful decision making skills in skilled youth soccer players: An analysis of visual search behaviours. *Journal of Motor Behaviour*, *39*, 395 – 408.

van de Mortel, T.F. (2008). Faking it: Social desirability response bias in self-report research. *Australian Journal of Advanced Nursing*, *25*, 40 – 48.

Vanden Auweele, Y., De Mortelaer, K., Rzewnicki, R., DeKnop, P., & Wylleman, P. (2004). Parents and coaches: A help or harm? Affective outcomes for children in sport. In Y Vanden Auweele (Ed.), *Ethics in youth sport.* Leuven, Belgium: Lannoocampus.

Van Yperen, N.W. (2009). Why some make it and others do not: Identifying psychological factors that predict career success in professional adult soccer. *The Sport Psychologist*, *23*, 317 – 329.

Vescovi, J.D., Rupf, R., Brown, T.D., & Marques, M.C. (2011). Physical performance characteristics of high level female soccer players 12 – 21 years of age. *Scandinavian Journal of Science and Medicine in Sports*, *21*, 670 – 678.

Visek, A.J., Harris, B.S., & Blom, L.C. (2013). Mental training with youth sport teams: Developmental considerations and best-practice recommendations. *Journal of Sport Psychology in Action*, *4*, 45-55.

Ward, P., Hodges, N.J., Starkes, J.L., & Williams, A.M. (2007). The road to excellence: Deliberate practice and the development of expertise. *High Ability Studies*, *18*, 119 – 153.

Warriner, K., & Lavallee, D. (2008). The retirement experiences of elite female gymnasts: self-identity and the physical self. *Journal of Applied Sport Psychology*, *20*, 301 – 317.

Weed, M. E. (2009). Research quality considerations for grounded theory research in sport & exercise psychology. *Psychology of Sport and Exercise*, *10*, 502-510.

Weiss, M.R., Amorose, A.J., & Wilko, A.M. (2009). Coaching behaviours, motivational climate, and psychosocial outcomes among female adolescent athletes. *Paediatric Exercise Science*, *21*, 475 – 492.

Weiss, M.R., & Smith, A.L. (1999). Quality of youth sport friendships: Measurement and validation. *Journal of Sport and Exercise Psychology*, *21*, 145 – 166.

Weiss, M.R., & Shuntz, C.P. (2004). A little friendly competition: Peer relationships and psychosocial development in youth sport and physical activity contexts. In M.R. Weiss (Ed.), *Developmental Sport and Exercise Psychology: A Lifespan Perspective* (pp. 165 – 198). Morgantown, WV: Fitness Information Technology.

White, S.A. (1996). Goal orientation and perceptions of the motivational climate initiated by parents. *Paediatric Exercise Science*, *8*, 122 – 129.

Williams, S. (2009, May 4). Football academies: Kicking and screaming. *The Telegraph.* Retrieved from http://www.telegraph.co.uk/sport/football/4938593/Football-academies-kicking-and-screaming.html

Winter, E.M., Abt, G.A., & Nevill, A.M. (2014). Metrics of meaningfulness as opposed to sleights of significance. *Journal of Sports Sciences*, *32*, 901 – 902.

Wylleman, P., Alfermann, D., & Lavallee, D. (2004). Career transitions in sport: European perspectives. *Psychology of Sport and Exercise*, *5*, 7-20.

Wylleman, P., & Lavallee, D. (2004). A developmental perspective on transitions faced by athletes. In M. Weiss (Ed.) *Developmental sport and exercise psychology: A lifespan perspective* (pp. 507 – 527). Morgantown, WV: Fitness Information Technology.

Zibung, M., & Conzelman, A. (2013). The role of specialisation in the promotion of young football talents: A person-orientated study. *Journal of Sports Sciences*, *13*, 452 – 460.

Appendix 1

Figure 3.1: PRISMA checklist

Section/topic	#	Checklist item	Reported on page #
TITLE			
Title	1	Identify the report as a systematic review, meta-analysis, or both.	6
ABSTRACT			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	Appendix 1
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known.	7 - 9
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	10
METHODS			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	Not registered
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	10 – 11
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	10 – 11
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	10
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	11 – 12
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	12 – 14
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	11

Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	13
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	13
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I^2) for each meta-analysis.	13

Section/topic	#	Checklist item	Reported on page #
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).	14 – 17
Additional analyses	16	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	17
RESULTS			
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.	Appendix 2; page 15
Study characteristics	18	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.	Appendix 3
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12).	Appendix 4
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.	Appendices 3 and 4
Synthesis of results	21	Present results of each meta-analysis done, including confidence intervals and measures of consistency.	17
Risk of bias across studies	22	Present results of any assessment of risk of bias across studies (see Item 15).	17
Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).	N/A
DISCUSSION			

Summary of evidence	24	Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers).	17 – 25
Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval identified research, reporting bias).	25 – 29
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	29
FUNDING			
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review.	Not funded

Appendix 2
Figure 3.1: PRISMA flow diagram

Identification

Records identified through database searching
(n = 2428)

Additional records identified through other sources
(n = 3)

Screening

Records after duplicates removed
(n = 1915)

Records screened
(n = 1915)

Records excluded at title
(n = 1832) and abstract (n = 39)

Eligibility

Full-text articles assessed for eligibility
(n = 44)

Full-text articles excluded, with reasons
(n = 12)

Included

Studies included in systematic review (n = 32)

Fig 3.1 PRISMA flow diagram

Appendix 3

Table 3.3 Overview of included studies from study one

Table 3.3

Summary results

Authors	Participants	Age	Data collection tool(s) / method(s)	Key findings
Holt & Dunn (2004)	20 Canadian youth male players 14 English professional youth players 6 English coaches	16.8 16.2	Semi-structured interviews	Discipline, Resilience, Commitment and Social Support central to success in elite youth soccer
Ommundsen, Roberts, Lemyre & Miller (2005)	1231 male players 488 female players All experienced Norwegian players.	14.3 13.9	Perceived Motivational Climate in Sport Questionnaire (Seifrez et al. 1992) Perception of Success in Sport Questionnaire (Roberts, Treasure and Balague (1992) Multidimensional Perfectionism Scale (Frost, Marten, Lahart, & Rosenblate (1990) Sport Friendship Quality Scale (Weiss & Smith, 1999) Self-Perception Profile for Adolescents (Harter, 1998)	Task orientated females who scored negatively on maladaptive perfectionism and perceived a mastery orientated climate reported better peer relations in soccer; Maladaptive perfectionist males who scored negatively on task orientation and perceived a performance orientated climate had negative peer relationships.
Holt & Mitchell (2006)	9 male players 3 male coaches English professional third division club	18.75	Semi-structured interview	Unsuccessful players lacked volitional behaviour, delaying gratification, determination to succeed, strategic career planning, and tangible support.
Macbeth & Magee (2006)	10 elite English partially sighted male players	Adult; age not reported	Questionnaire Focus Groups	Partially sighted soccer players are prevented from experiencing a normalized career path; Three key ways into partially sighted soccer are educational institutions; pan-disability soccer; and professional soccer clubs.
Moran & Weiss (2006)	67 male players 71 female players 8 male coaches 2 female coaches United States competitive high school teams	16.1	Sport Leadership Behaviour Inventory (Glen & Horn, 1993) Self-Perception Profile for Adolescents (Harter, 1988) Sport Friendship Quality Scale (Weiss & Smith, 1999) Personal Attributes Questionnaire (Spence & Helmreich, 1978)	Playing ability strongly linked to teammate and coach ratings of leadership ability in male and female players; Coaches ratings of leadership quality wholly dependent on playing ability; Peer leaders demonstrate skills to direct activities, get on well with people, be confident in soccer ability, and engage in positive peer-relationships.
Ullrich-French & Smith (2006)	99 male players 87 female players United States	11.6	Sport Friendship Quality Scale (Weiss & Smith, 1999) Self-Perception Profile for Children (Harter, 1985) Sport Enjoyment Scale (Scanlan, Carpenter, Schmidt, Simons, & Keeler, 1993) Perceived Stress Scale (Cohen, Kamarck, &	Low stress levels were predicted by high peer acceptance and father-child relationships; Higher self-determined motivation predicted by higher peer acceptance, higher father-child relationship, friendship quality and mother child relationship.

			Mermelstein, 1985) Sport Motivation Scale (Pelletier et al. 1995)	
Ward, Hodges, Starkes & Williams (2007)	203 male elite and sub-elite players from national level academies in England	Not reported	Retrospective domain specific participation history questionnaire	Accumulated soccer practice hours consistently discriminate between skill levels across ages; Elite players spend more time in decision-making activities during team practice, have higher levels of motivation, and have greater parental support; Maturational indices, time spent in playful activities, sporting diversity and time at which specialization occurred did not differentiate between elite and sub-elite; Deliberate engagement with soccer specific activities is likely to lead to an elite status.
Hill, Hall, Appleton & Kozub, 2008)	144 male centre of excellence players from England	14.4	Athlete Burnout Questionnaire (Raedeke & Smith, 2001) Multidimensional Perfectionism Scale (Hewitt & Flett, 1991) Unconditional Self-Acceptance (Chamberlain & Haga, 2001)	Unconditional self-acceptance partly mediates the relationship between perfectionism and burnout; Self-worth is central to socially prescribed and self-orientated perfectionism, and this association potentially underpins maladaptive achievement striving behaviours, increasing a soccer player's vulnerability to burnout.
Christensen & Sørenson (2009)	25 male talented academy players from Denmark (aged 15-19 years)	Mean not reported	Focus groups Interviews	Football and education presents significant dual career demands for talented football players in Denmark. The importance place on education by key social agents can create personal player-level concern, lower exam results, stress, dropout and mental breakdown. School and football have in-built dichotomous demands and expectations that affect progression in both when not well managed.
Ford, Ward, Hodges and Williams (2009)	11 "still elite" male players 11 "ex-elite" male players 11 recreational male players All players from English soccer.	Not reported	Retrospective sports and physical activity participation questionnaire	Elite groups average more hours per year in soccer practice compared to those who do not progress to elite levels; Practice and play in soccer between six and 12 years old contributes to the development of expert performance in English soccer.
Toering, Elferink-Gemser, Jordet & Visscher (2009)	159 elite male (Highest national standard in the Netherlands) 285 non-elite male (Regional standard)	14.5	Generalized Self-efficacy Scale (Schwarzer & Jerusalem, 1995) Inventory of Metacognitive Self-regulation (Howard et al. 2000) Reflective Learning Continuum (Peltier et al. 2006) Self-regulatory Inventory (Hong & O'Neill, 2001) Self-regulation Trait Questionnaire (Herl et al. 1999)	Higher self-regulatory scores discriminate between elite and non-elite players; High scores on reflection and effort are associated with a higher level of performance.
Ullrich-French & Smith (2009)	148 male and female competitive soccer players from the United States	11.7	Sport Friendship Quality Scale (Weiss & Smith, 1999; 2002) Self-perception Profile for Children (Harter, 1985)	Perceived competence, positive friendship quality, and the combination of mother relationship quality and peer relationships predict continued participation within a soccer team.

			Sport Enjoyment Scale (Scanlan et al. 1993) Perceived Stress Scale (Cohen et al. 1983) Sport Motivation Scale (Pelletier et al. 1995)	
Van Yperen (2009)	65 Dutch male players (18 professional) 47 non-professional)	16.58	Ways of Coping Questionnaire (Folkman & Lazarus, 1985) Self-report Measure of Goal Commitment (Hollenbeck, O'Leary, Klein, & Wright, 1989) Seeking Social Support Measure (Folkman & Lazarus, 1985)	Goal commitment, problem-focussed coping behaviours, and social support seeking predict career success.
Weiss, Amorose, & Wilko (2009)	141 female competitive high school players in the United States	16	Perceived Coach Behaviour Scale (Black & Weiss, 1992) Self-perception Profile for Adolescents (Harter, 1988) Perceived Motivational Climate in Sport Questionnaire – 2 (Newton, Duda & Yin, 2000) Motivational Orientation in Sport Scale (Weiss, Bredemeier, & Shewchuck, 1985) 5-point scale items of enjoyment	Coaching feedback and motivational climate contribute to female soccer players' continued involvement; Perceptions of greater positive and informational feedback provided by coaches after successful performance attempts, greater emphasis on mastery climate, and less emphasis on a performance climate, are significantly related to greater ability perceptions, enjoyment and intrinsic motivation.
Elliot & Weedon (2010)	English Premier League Academy representatives	Not reported	Not reported	Representatives viewed foreign migrants to EPL academies as positive for the development of English players due to the influence they could have on developing English players' technical ability and goal commitment.
Ford, Yates & Williams (2010)	25 male coaches ranging from amateur clubs to the English Premier League)	31.7	Observation checklist Time use	Coaches provide high levels of instruction, feedback, and management, irrespective of the activity in which players engaged; Few differences in practice activities and instructional behaviours evident across age groups or skill levels; Absence of any age-or skill-related progression; Significant gap between literature and practice in coaching youth soccer players.
Konter (2010)	312 male players of three levels (levels not specified)	14.71	Adapted Toni-2 questionnaire (Konter & Yurdabakan, 2010)	Nonverbal intelligence levels increase with age and skill level.
Sagar, Busch, & Jowett (2010)	81 male players from English soccer academies (levels not specified)	14.22	Performance Failure Appraisal Inventory (Conroy, Willow, & Metzler, 2002) Semi-structured interviews	Fear of failure affects adolescent male soccer players' soccer performance and interpersonal behaviours; Players demonstrated ineffective coping behaviours to deal with a fear of failure.
Christensen, Laursen & Sørensen (2011)	Danish male soccer players (number not reported)	Not reported	Participant observation Semi-structured interviews	Small group and position-specific community of practice creates opportunities for players to extend playing opportunities, mirror older players, and have greater feelings of being recognised by the coach; Small group and position-specific community of practice assumed ownership of their long-term development as soccer players.
Kavassanu, White, Jowett, &	118 male players	13.93	Task and Ego Orientation in Sport	Elite players were significantly higher in task orientation, had higher

England (2011).	69 elite (professional club centre of excellence of academy) 49 non-elite (recreational)		Questionnaire (Duda & Nicholls, 1992) Parent Initiated Motivational Climate Questionnaire-2 (White, 1996)	perceptions that their mother valued a motivational climate that emphasized learning and enjoyment, and had lower perceptions that both parents created in which success and effort were valued, than non-elite players; Task orientation and parenting climate that values effort and learning may facilitate high levels of soccer achievement.
Sapeija, Dunn & Holt (2011)	194 male players from the highest level of age-group soccer in Canada	13.64	Sport Multidimensional Perfectionism Scale – 2 (Gotwals & Dunn, 2009) Parenting Style Inventory – 2 (Darling & Toyokawa, 1997)	Exposure to heightened authoritative parenting may play a role in developing healthy perfectionist orientations; Exposure to heightened authoritative parenting may decrease the likelihood of developing unhealthy perfectionist orientations.
Toering, Elferink-Gemser, Jordet, Jorna, Pepping & Visscher (2011)	6 male coaches (Working at the highest level of national competition in the Netherlands) 13 male players (Highest national level of competition in the Netherlands)	37.2 16	Semi-structured interviews Behavioural observations Self-regulation of Learning Self-report Scale (Toering, Elferink-Gemser, Jonker, Van Heuvelen, & Visccher, 2012)	Player's practice environment plays a key role in developing self-regulated learning where players take responsibility for learning.
Ford et al. (2012)	328 elite academy level male players at the top level in the following countries: Brazil, England, France, Ghana, Mexico, Portugal, and Sweden.	Under-16	Participation History Questionnaire	Developmental activities of elite youth soccer players follow early engagement or specialisation pathways, rather than early diversification.
Ford & Williams (2012)	16 elite youth male soccer players from the academies of five soccer clubs in the Premier League in England 16 male players who had been released from the same five soccer academies	15	Participation History Questionnaire (Ford, Low, McRoberts, & Williams, 2010)	Elite youth players who reach a professional level take part in significantly more soccer play and practice activities than elite youth players who did not progress to professional level, offering support for the early engagement hypothesis.
Larsen, Alfremann, & Christensen (2012)	1 manager of sports 1 club manager 2 youth coaches 4 male youth players 3 school sport co-ordinators 1 consultant From a Danish male soccer club	Not reported	Semi-structured interviews Fieldwork	Different implicit and explicit psychosocial skills are important for career transitions in soccer; Explicit psychosocial skills are motivation, self-awareness, and the ability to work hard; Implicit skills deemed more important for career transitions, and include: managing performance and process outcomes, utilisation of team working skills, and general social skills; Despite the expectation for soccer players to display these implicit and explicit skills, they are not directly practiced.
Mills, Butt, Maynard, & Harwood (2012)	10 male English premier league and championship coaches (split not reported)	47.5	Semi-structured interviews	Six interrelated categories either positively or negatively affect talent development: awareness; resilience; goal-directed attributes; intelligence; sport-specific attributes; environmental factors; Awareness seen as a fundamental and mediating element of talent development.

Study	Sample	Age	Measures	Findings
Roca, Williams, & Ford (2012)	48 male	20.7	Participant History Questionnaire Video clips Response accuracy scores	Soccer specific play activity the strongest predictor of cognitive-perceptual expertise
Taylor & Bruner (2012)	133 elite male youth players from three academies of clubs in the second tier of English soccer and one academy from a club from the fourth tier of English Soccer	14.23	Coach Behaviour Scale for Sport (Côté, Baker, Hay, Yardley, & Sedgwick, 1997) Youth Sport Environment Questionnaire (Eys, Loughead, Bray, & Carron, 2009) Basic Needs Satisfaction in Relationships Scale (LaGuardia, Ryan, Couchman, & Deci, 2000) Youth Experiences Survey (Hanson & Larsen, 2005) Basic Need Satisfaction in Sport Scale (Ng, Lonsdale, & Hodge, 2011) Engagement vs. Disaffection with Learning scale (Skinner, Kinderman, & Furrer, 2009)	Players who report more coach rapport and task cohesion experience greater psychological need satisfaction; Psychological need satisfaction positively associated with more goal setting experiences, leadership opportunities and better emotional regulation.
Larsen, Alfermann, Henriksen & Christensen (2013)	Case-study of a Danish male soccer club. Number of participants not reported	Not reported	Participant observation Semi-structured interviews	A successful talent development environment is characterized by the interaction between players and a staff of coaches, assistants and managers that helped players to focus on: (1)　A holistic lifestyle (2)　Handling dual careers (sport and school) (3)　Developing the ability to work hard Being self-aware and responsible
Curran, Hill, & Niemiec (2013)	202 male 79 female Club level (country not reported)	13.67	Social Context Questionnaire (Belmont, Skinner, Wellborn, & Connell, 1988) Basic Needs Satisfaction in Sport Scale (Ng, Lonsdale, & Hodge, 2011) Engagement vs. Disaffection with Learning Scale (Skinner, Kindermann & Furrer, 2009)	Coaches providing structure (e.g. guidance, expectations and feedback) in an autonomy supportive way (e.g. respecting a player's volition) relates positively to player-level behavioural engagement and negatively to player – level behavioural disaffection; with relationships mediated by basic psychological need satisfaction.
Quested et al. (2013)	6641 male 1020 female Club players from France, Greece, Norway, Spain, and England	11.56	Health Care Climate Questionnaire (Reinboth, Duda, & Ntoumains, 2004) Basic Need for Autonomy Statements (Standage, Duda, & Ntoumanis, 2005) Need Relatedness Scale (Richer & Vallerand, 1998) Intrinsic Motivation Inventory (McAuley, Duncan, & Tammen, 1989) Intentions to Dropout Items (Sarrazin, Vallerand, Guillet, Pelletier, & Curry, 2002).	Perceptions of autonomy support strongly predict psychological need satisfaction, which in turn predicts enjoyment. Higher levels of soccer enjoyment is a strong predictor of intention to dropout; Substantial indirect effects found from psychological need satisfaction on intention to dropout; Substantial indirect effects were shown from autonomy support on enjoyment and intention to dropout.
Zibung & Conzelman (2013)	159 male players who had played for a Swiss national team	Not reported	Retrospective questionnaire	Comprehensive soccer practice and play inside and outside of club settings forms the basis for subsequent soccer expertise.

Appendix 4:
MMAT criteria and appraisal

Table 3.4

MMAT criteria and appraisal

PART I. MMAT criteria & one-page template (to be included in appraisal forms)

Types of mixed methods study components or primary studies	Methodological quality criteria (see tutorial for definitions and examples)	Responses			
		Yes	No	Can't tell	Comments
Screening questions (for all types)	• Are there clear qualitative and quantitative research questions (or objectives*), or a clear mixed methods question (or objective*)?				
	• Do the collected data allow address the research question (objective)? E.g., consider whether the follow-up period is long enough for the outcome to occur (for longitudinal studies or study components).				
	Further appraisal may be not feasible or appropriate when the answer is 'No' or 'Can't tell' to one or both screening questions.				
1. Qualitative	1.1. Are the sources of qualitative data (archives, documents, informants, observations) relevant to address the research question (objective)?				
	1.2. Is the process for analyzing qualitative data relevant to address the research question (objective)?				
	1.3. Is appropriate consideration given to how findings relate to the context, e.g., the setting, in which the data were collected?				
	1.4. Is appropriate consideration given to how findings relate to researchers' influence, e.g., through their interactions with participants?				
2. Quantitative randomized controlled (trials)	2.1. Is there a clear description of the randomization (or an appropriate sequence generation)?				
	2.2. Is there a clear description of the allocation concealment (or blinding when applicable)?				
	2.3. Are there complete outcome data (80% or above)?				
	2.4. Is there low withdrawal/drop-out (below 20%)?				
3. Quantitative non-randomized	3.1. Are participants (organizations) recruited in a way that minimizes selection bias?				
	3.2. Are measurements appropriate (clear origin, or validity known, or standard instrument; and absence of contamination between groups when appropriate) regarding the exposure/intervention and outcomes?				
	3.3. In the groups being compared (exposed vs. non-exposed; with intervention vs. without; cases vs. controls), are the participants comparable, or do researchers take into account (control for) the difference between these groups?				
	3.4. Are there complete outcome data (80% or above), and, when applicable, an acceptable response rate (60% or above), or an acceptable follow-up rate for cohort studies (depending on the duration of follow-up)?				
4. Quantitative descriptive	4.1. Is the sampling strategy relevant to address the quantitative research question (quantitative aspect of the mixed methods question)?				
	4.2. Is the sample representative of the population understudy?				
	4.3. Are measurements appropriate (clear origin, or validity known, or standard instrument)?				
	4.4. Is there an acceptable response rate (60% or above)?				
5. Mixed methods	5.1. Is the mixed methods research design relevant to address the qualitative and quantitative research questions (or objectives), or the qualitative and quantitative aspects of the mixed methods question (or objective)?				
	5.2. Is the integration of qualitative and quantitative data (or results*) relevant to address the research question (objective)?				
	5.3. Is appropriate consideration given to the limitations associated with this integration, e.g., the divergence of qualitative and quantitative data (or results*) in a triangulation design?				
	Criteria for the qualitative component (1.1 to 1.4), and appropriate criteria for the quantitative component (2.1 to 2.4, or 3.1 to 3.4, or 4.1 to 4.4), must be also applied.				

*These two items are not considered as double-barreled items since in mixed methods research, (1) there may be research questions (quantitative research) or research objectives (qualitative research), and (2) data may be integrated, and/or qualitative findings and quantitative results can be integrated.

Study	Rating	Screening questions	Qualitative (all)				Quantitative (descriptive)				Mixed-methods	Final quality score.	Notes[7]	Themes present
Holt and Dunn (2004)	***	✓ ✓	✓	✓	✓	--						75%		Psychological (Discipline, commitment and resilience) and social (social support)
Ommundsen, Roberts, Lemyre and Miller (2005)	**	✓ ✓					--	✓	✓	--		50%		Social (peer relationships)
Holt and Mitchell (2006)	***	✓ ✓	✓	✓	✓	--						75%		Psychological and social
MacBeth and Magee (2006)	**	✓ ✓	✓	--	✓	--						50%		Social (educational institutions, football opportunities)
Ullrich-French and Smith (2006)	**	✓ ✓					--	✓	✓	--		50%		Social (Parent and peer relationships)
Moran and Weiss (2006)	*	✓ ✓					--	--	✓	--		25%	Lacks details of number of participants initially sampled or response rates	Social (peer experiences, coach perceptions)
Ward, Hodges, Starkes & Williams (2007)	**	✓ ✓					✓	--	✓	--		50%		Behavioural (Practice and play activities)
Hill, Hall, Appleton and Kozub (2008)	**	✓ ✓					✓	--	✓	--		50%	Unclear how many participants were initially sampled and what the response rate was	Psychological (Perfectionism and unconditional self-acceptance)
Weiss, Amorose and Wilko (2008)	*	✓ ✓					--	--	✓	--		25%		Social (Coach behaviours and motivational climate)
Christensen and Sørenson (2009)	***	✓ ✓	✓	✓	✓	--						75%	Reflexive techniques discussed but not linked to how this impacted on research process or findings	Social (Dual career challenges)
Ford, Ward, Hodges and Williams (2009)	**	✓ ✓					✓	--	✓	--		50%		Behavioural (Practice and play activities)
Toering, Elferink-Gemser, Jordet and Visscher (2009)	**	✓ ✓					--	✓	✓	--		50%		Psychological (self-regulation)
Ullrich-French and Smith (2009)	**	✓ ✓					--	✓	✓	--		50%		Psychological (perceived competence) and social (peer relationships, parental

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[7] Notes are included to indicate where there was initial disagreement between authors in blind MMAT rating and – in these instances – to justify why a criterion was/was not awarded.

Study																%	Notes	Focus
																		relationships)
Van Yperen (2009)	*	✓	✓					--	✓	--	--				25%	Unclear sampling strategy and lack of clarity over inventories used	Behavioural (social support seeking, problem-focussed coping behaviours), psychological (goal commitment) and social (family structure)
Elliot and Weedon (2010)	*	✓	✓	--	--	✓	--								25%		Social
Ford, Yates and Williams (2010)	**	✓	✓					--	✓	--	✓				25%		Social (Coach behaviours)
Konter (2010)	*	✓	✓					--	--	✓	--				25%		Psychological (non-verbal intelligence)
Sagar, Busch and Jowett (2010)	*	✓	✓	✓	✓	✓	--	--	--	✓	--	✓	✓	✓	25%		Psychological (Fear of failure)
Christensen, Laursen and Sørenson (2011)	***	✓	✓	✓	✓	✓	--								75%		Social (Talent development environment)
Kavassanu, White, Jowett and England (2011)	*	✓	✓					--	--	✓	--				25%	Sampling strategy and response rate unclear	Psychological (task orientation) and social (parental climate)
Sapieja, Dunn and Holt (2011)	*	✓	✓					--	--	✓	--				25%		Psychological (adaptive perfectionism) and social (parental behaviours)
Toering et al. (2011)	***	✓	✓	✓	✓	✓	--	--	✓	✓	✓	✓	✓	✓	75%		Psychological (self-regulation)
Taylor and Bruner (2012)	*	✓	✓					--	--	✓	--				25%		Social (Perceptions of team cohesion and coach relationships)
Ford et al. (2012)	*	✓	✓					--	--	✓	--				25%		Behavioural (Practice and play activities)
Ford and Williams (2012)	**	✓	✓					✓	--	✓	--				50%		Behavioural (Practice and play activities)
Larsen, Alfermann and Christensen (2012)	***	✓	✓	✓	✓	✓	--								75%		Psychological (motivation and self-awareness) and social (ability to utilise social skills)
Mills, Butt, Maynard and Harwood (2012)	***	✓	✓	✓	✓	✓	--								75%		Psychological (awareness, resilience, goal-directed attributes, sport-specific attributes) and social (significant others, soccer culture)
Roca, Williams and Ford (2012)	**	✓	✓					✓	--	✓	--				50%		Behavioural (Practice and play activities)

Study												%	Category
Curran, Hill, & Niemiec (2013)	*	✓	✓					--	--	✓	--	25%	Social (Coach behaviours)
Larsen, Alfermann, Henriksen and Christensen (2013)	***	✓	✓	✓	✓	✓	--					75%	Social (Talent development environment)
Quested et al (2013)	*	✓	✓					--	--	✓	--	25%	Social (Coach behaviours)
Zibung and Conzelman (2013)	***	✓	✓					✓	✓	✓	--	75%	Behavioural (Practice and play activities)

Appendix 5:

Ethics information for study 2

Developmental Experiences of Elite Female Youth Soccer Players

This study will involve you taking part in a series of in – depth interviews over a two – year period. The length of each interview will be determined by the amount of information you wish to discuss, but as a guide it is anticipated that each interview will take approximately 1 hour. The interviews will be recorded using a digital voice recorder. Your participation in this study is voluntary. You are free to refuse to commence the interviewing or withdraw at anytime during the proceedings. The results of the research may be published, but your name will not be used and no information that makes you personally identifiable will be included. All data collected will be coded to maintain anonymity; and any personal details along with the original recording will be kept in a secure setting with access being limited to myself and my research supervisor.

The benefit of taking part in this study is that you will be contributing to a body of research that will help to advance the profile of female football and help to further the understanding of the developmental processes of female football players.

Participant to complete:

I have read the informed consent form and study information sheet. The nature, risks and benefits of the study have been explained to me. I understand that I am free to withdraw or discontinue my participation at any time without penalty or loss of benefit to myself, and without giving reason for doing so. I have asked any questions relating to my participation in the study and understand the answers provided.

Signed:.. Date:...........................

Print:.. Date:...........................

Parent or guardian consent (if under 18 years of age)

Signed:.. Date:...........................

Print:.. Date:...........................

Researcher to complete:

I have explained to the above individual (and their parent / guardian if the participant is under 18 years of age) the nature, purpose and risks associated with their participation. I have answered any questions raised and have witnessed the above signature (s).

Signed:.. Date:...........................

Print:.. Date:...........................

Interview Guide

Introduction:
How did you get started in football? Why do you play football? Did you play any other sports or do you now play any other sports? Has anybody influenced you to play football over other sports?

Family role: Section changed from initial guide due to comments made in pilot interview relating to grandparents, wider family and siblings – originally section was entitled 'parents role'

Do your parents support you? What types of support do your parents offer? Has the support offered by your parents changed over your career? Do you like the involvement that your parents have in your career? Do you feel this support has helped you throughout your career?

Is there anybody else in your family that supports you? If yes the same questions are to be asked for other aspects of the family network such as siblings, grandparents etc.

Peer support: Do you get any support from your friends that helps you as a developing player?

Coach's role:
How would you describe your current coach? (or coaches for those in numerous settings?) Has the type of support that you get from your coaches changed throughout your career? Do you get different types of your support from different coaches? Do your coaches ever put you under any pressure? Do you feel the support you get from coaches has helped develop you as a player?

Obstacles:
Have you faced any obstacles? How have you overcome them? Do you see any threats to your future career progression?

Sacrifices
Do you have to make any sacrifices to be able to take part in football?

General Football Attributes:
What do you think makes a good football player? What do you think is necessary to become a good football player in women's football?

General Personal Attributes:
Why do you think you have been successful?

Psychological Preparation:
Do you consider psychological skills to be important in football? Do you have any particular psychological skills that you use as part of your training? What do you think are your main psychological strengths?

Appendix 6:

Sample interview transcription from study two

MICHELLE Interview

Interviewer   Thank you for popping in. Today we are just going to talk a little bit about your football career, I'm interested to know why and how you have got started in football and really what's got you to today. So just to start off now, how did you started in football?

MICHELLE   When I was younger, [my older brother] started playing for [local boy's football club], when he started playing my dad became the coach. As he was going through his coaching badges and that and then as I hit about 5 or 6 he was at Level 1/ Level 2. So as he was off to work and went I wasn't at school I would go with my dad, played football and that then at about 7 I think, I started in the local team [local boy's football club]. So basically I got started through my dad doing his coaching Level 1 and Level 2 so….

Interviewer   And you were going along and accompanying him at work?

MICHELLE   Yes, basically, tried to do that.

Interviewer   So what's your career path really been since then, since you got started?

MICHELLE   Since I got started I was at a boys club in [local boy's football club] but I had problems with that because they weren't playing me so as an 8 year old not being played my dad was asking why they not playing me and they basically told me if I was a boy I would have been played, so my dad said right lets get out of there and then I got scouted for [current team] Ladies, [current team] United Ladies, under 10's I think it was, got in there and been there ever since really. When I think I was about 12 or 13 I got scouted for [current team] United Academy, so I was playing for [current team]

and the Academy side and then its both and then just last year it got changed to [new club name], obviously [changes happened at the club], that's when I got scouted for the [youth international] college's team as well.

Interviewer   Okey Dokey, so as you have been sort of going through your football career there and we've had a bit of a jump – almost from 13 – 16. Did anything significant happen during that time? Can you tell me anything about your progression from there?

MICHELLE   Yeah, the senior team, it was when I was 15. I got asked to move up to the under 21's and then had a season in the under 21's then straight after that a season without when I went straight on to the reserves playing open age football and everything and that was at 16. I made my debut for the first team at 16 as well, so just in and out of the first team at the minute.

Interviewer   And how long have you been in the [youth international] squad?

MICHELLE   Since last season.

Interviewer   Ok cool. So can you tell me a little bit about why you play football?

MICHELLE   Why? Cos I like it, good at it, successful, obviously makes me feel good about myself, gives a purpose to what I do, sort of thing.

Interviewer   What do you mean gives a purpose to what you do?

MICHELLE   Like you see a lot of people my age not doing a lot, like you know, going out all the time and I don't know, going out drinking, not doing anything whereas I'd rather go

out training, doing something, have a goal to aim for.

Interviewer   So in that sense does football affect you as a person?

MICHELLE   I wouldn't say it affects me as a person but it affects my lifestyle quite a lot, obviously I don't get to go out with all my mates on a Friday night cos I've got training or a game or whatever, it affects me in that way but not as a person as so much.

Interviewer   In terms of the lifestyle changes do you think that has helped to develop you at all or?

MICHELLE   Yes, I think it has, obviously instead of going out drinking, you know, obviously without the drinking obviously your fitness is going up, you're training hard, you're eating better, you're getting a good night's sleep, you know you're not stressed as much, that sort of thing.

Interviewer   Alright, so just going back to when you were younger a little bit, did you play any other sports when you were younger? When I say younger, I mean when you first started playing football?

MICHELLE   When I first started playing football, I played tennis, that was the only thing, you see my gran was quite successful at tennis so she got me involved in that then I started playing football, I still played tennis up till I was about 15 but sort of dropped it when my football started kicking off.

Interviewer   All right and what about sort of later on in your childhood?

MICHELLE   I did a lot of athletics, I think I ran, I think I did Yorkshire for 800 metres in cross country, I say I did Yorkshire, I did tennis I think I won York & District League and everything in that so.

Interviewer   So three major sports then, but footballs taken precedent! Do you play any sports now or is it just football?

MICHELLE   It's just my football now, obviously I do my training like running and stuff, I wouldn't say competing or anything.

Interviewer   So at what point did you start to just really focus on football and that became your main sport?

MICHELLE   It was when I was, obviously when I was 15 I got asked to move up to the under 21's you know I was thinking a 15 year old play with the under 21's, it's a bit of a big step I don't know if I can, obviously with the training increased it was more training to do, obviously like physiologically I couldn't train every single day whilst playing a that high level so I had to choose and obviously football is more successful and I enjoyed it more so.

Interviewer   Ok, so we were just going to move to talking about some of your personal and team successes because that seems quite important in terms of why you play football, so what successes have you had in football?

MICHELLE   As a child as I was growing up I was with [current team] I think we've been unbeaten since, I think we've only been beaten I count 10 times for [current team] since I've been there since I was 9 it's a really successful club. Won the county cup every year,

on a personal level I think I have won a award every year whether it be managers player, players player, best attitude, them sort of awards obviously, I think best attitude award I think I've won 4 or 5 of them which personally I quite enjoy having a good attitude towards training and everything. So yes and then obviously got one of my major successes is my [youth international] cap and then just general things like that. Another success was, I didn't get anything from it but playing for the first team for the first time, you know, getting involved in the first team setup, that sort of thing.

Interviewer   So how do you think playing for the first team has helped to develop you as a player?

MICHELLE   Helps you realise what sort of standard you got to get to at the minute I would say I am just below the first team standard obviously they're ridiculous they train twice as much as we do, give up twice as much as I do, but it does show me what I need to do and it's more physiological things like the speed that they are at, physical fitness, that sort of thing, technically the same ability just that extra fitness edge.

Interviewer   In terms of your football is there anybody that has sort of influenced you to play football over other sports, you mentioned your dad earlier on, do you want to talk to me a little bit more about the role your dad has played?

MICHELLE   My dad is the one who got me started in football and obviously when I was growing up, you know in the back garden teaching me, but he was not one of those dads who was pushing me, he wouldn't stand at the side of the pitch and scream and shout at me but as a coach he would ask me how I'd done and what not but he wasn't screaming and shouting at me. I'd say my brother played quite a big part in getting me involved in football, you see, in the back garden playing with him, he got signed at a pro club, he did a lot of things wrong did my brother, he could have made it to quite high level semi-pro but he didn't, he was messing around, preferred going out drinking, going out with his mates, not training, missing training and to be honest I

have learnt from that, I have learnt not to that if that makes sense, to do the opposite that's what I need to do to succeed. And obviously another person is my granddad, he's the one who takes me to and from training all the time, he's the one, I think he's seen everyone of my matches, so yes.

Interviewer   All right then, so we will take each of those of we can do, so in what way does your dad support with your football now?

MICHELLE   Now? I do it all day hasn't have much of an affect much because obviously my game clash with his team as he's at [Championship club in a coaching role] now and plays on a Sunday and trains the same night s as I do, but on a similar level he will set me goals and targets and stuff, and every year I have this white board in his house and he set goals for me to reach every year, what I need to do and just like that, that's how he supports me at the minute.

Interviewer   And has that sort of changed at all, the way your dad supports you with your football?

MICHELLE   That's been same for the past couple of years to be honest, obviously when I was younger he used to take me to training and be a bit more involved but as I've got older and his works increased as well obviously being involved at [Championship club in a coaching role] and everything he can't take me to and from training and watch my games as much.

Interviewer   Your dad used to coach you when you were younger, how have you found having a parent as a coach as well, has that had any effect on you?

MICHELLE   Obviously it's quite nice having a personal relationship with your coach and everything but at the same time especially if it's a group coach environment, you get kids saying you're only there because of your dad and that sort of thing but to be

honest, it never affected me in that sort of way, obviously you know people are going to say stuff but if never really effected me, I quite liked having my dad coach me.

Interviewer   So what did you enjoy about it, because you seem quite positive about it, is there any specific things you enjoyed about it?

MICHELLE   I think it was just knowing your coach, you know my Dad coaches on the weekends and took me with him and obviously it was quite nice being coached by my Dad growing up…obviously you get a lot of coaches that come up and don't treat you how you want to be treated and telling you to do fitness but they're not encouraging you, telling you "you're not working hard enough", "you do this", "you're playing crap", that sort of thing, it's like sometimes you get coaches who don't know how to handle you to get the best out of you obviously because he was my dad, he knew how to handle me, he knew what I wanted [from soccer]; he knew how I learnt things best as well so he would show me things, tell me things as well, ask me things so all that really helped me learn as a player.

Interviewer   So you mentioned the role of your dad has changed a little bit now, do you like the involvement that it has in your career now just as your dad and rather than your dad the coach?

MICHELLE   Yes, obviously it is a bit better now, I'm getting older and obviously progressing through to the first team I can't have people saying you're only there because of your dad, that sort of thing so it's quite nice him coming to watch me as a dad rather than him coming and being a coach and assessing me, that sort of thing, so yes, it's quite nice.

Interviewer   In terms of roles as your dad, what type of support does he offer you now if we forget about the coach role that he plays, what types of support does he offer now?

MICHELLE   Anything from a normal dad really, go to him when I am upset or anything, just a normal dad really.

Interviewer   Again you seem sort of quite positive about it, do you think the support you've had has helped support you throughout you're career?

MICHELLE   Yes, I think it's helped me a lot you see my dad being a coach I have got a lot of contacts from it, people like [prominent male], coaches from the FA and stuff have seen me grow up and obviously if in that respect I have got a lot of contacts where coaches have called up my dad and been have you heard of [Michelle], you know [Michelle's father]'s daughter, yes I've seen her grow up and that sort of thing so contacts wise it's been real good.

Interviewer   So now you mentioned your brother earlier, and you sorted of hinted that he has affect you in a slightly different way in terms of your development, so you talk to me a little bit of how your brother might have affected you, I know you've said he's almost set the example of what not to follow.

MICHELLE   Yes, obviously there is always a lot of competition between brothers and sisters, and I think when my brother was 16 he got signed for [professional club], he'd been at [different professional academy sides] and places before but he got signed for [professional club] and that's where he was mainly and that was round about the time when I was first getting signed for [current team] so obviously so I think he was feeling a bit of competition, his little sister getting signed for [current team], that sort of thing, but he has the wrong attitude, he was going out drinking all the time, I think he thought he'd made it when he was 16 /17 and obviously when I was seeing him and when he got kicked out of the club I saw how he reacted, you know, he didn't have a good reaction to it and from there on he gave up football and he was a good player and if he had a good attitude he could of made it [at professional club], that

sort of thing. He had all the talent in the World and he was at [professional clubs] from a really young age but he let it all go to his head. You know, he thought he had made it when he was 16 when really he should have known that you haven't made it when you're 16, you've made it when you're somebody as good and as successful as David Beckham, that sort of thing. Obviously he made lots of wrong choices like not looking after himself, going out drinking with his mates a lot and never really listening to his coach. My brother always thought that he knew better than everyone else, know what I mean? Obviously like I was around when when I saw him get kicked out [of professional club], I saw how he reacted and now he'll advise me on his mistakes. I take a lot from that you know, that has helped shape my career.

Interviewer   And does your brother play a role for you now in terms of your continuing development if you like, does he have any influence on that?

MICHELLE   He does sort of, like you know if I'm like doing something and he's you don't want to be doing that, obviously he'll advise me on his mistakes rather than what he did if that makes sense, so it's sort of like the reverse of what I'm doing and how I've shaped my career.

Interviewer   So is it mainly sort of lifestyle advise and that kind of thing and what not to, alright. I'm interest when you mentioned earlier with your granddad as well, I know you mentioned your granddad takes to training and stuff, is there anything else your granddad does?

MICHELLE   Just, he's one of them people that's real, he's honest, if I've had a crap game he'll be like you know, you've played crap, that sort of thing and I don't know why but I reckon I want to impress the most cos he's the one when I was 9 years old he was taking me to and from training to [current team] twice a week, taking me to my matches on a Saturday and he's been there every single match I think I've had, he's like, he cancels his commitments to take me so, he's put a lot in so obviously for me

to sort of show it back to him is ……

Interviewer   All right and when you mentioned there he'll comment on how well you've played and well you haven't played, how does he go about doing that, is it, does it from an information point of view or?

MICHELLE   Its just quite blunt, obviously he hasn't got any coaching or he doesn't really have a clue it's sort of quite of honest, its sort of like a fans point of view, like you know you here people in the pub saying, like Sunday league drinkers aren't they telling everyone what they should and shouldn't be doing in the premiership, its like that, my granddad doesn't have a clue but if I haven't played so well or I've played really well he'll tell me.

Interviewer   With this many people involved in sort of giving you information from all sorts of different angles do you ever find that's there's any conflicts between what they'll say and what your coaches say?

MICHELLE   Yes, I find that a lot, I find myself, I'm the sort of player, you know, I like to get the ball down, I'm not a big strong player winning headers, making challenges and stuff, and so I play, gets it down and pings it and stuff, obviously my coaches at [current team] try and get me to play like that, playing like that you know, a holding ball, mid field, get the ball down obviously a fine line, especially my granddad, he's you need to get more stuck in, you need to be winning your challenges and stuff but on the other hand, my coaches at [current team] have been don't get involved in the physical stuff, play your football, that sort of thing.

Interviewer   Does anything your granddad tells you, does that ever contrast with stuff that your dad says?

MICHELLE   Yes, with my dad being a coach my dad says a lot of similar things from like my coaches at [current team] and he understands what I'm doing. As I've got older and moved to [current team] my dad still talks to mke about how I can improve cos he still watches all of my games when he isn't coaching. If my coaches are happy, but if I say [current female coach] hasn't told me to do that or my coach hasn't told me to do that I always take my dad's advice on board, but whenever my dad says something different to [current coach], he'll always be like "take your coach's advice because you play for them, you don't play for me now". This helped me to understand a bit more about why I needed to listen to my coach and sorta made me value what they said more but then he's sorta like happy but my granddad will "be your coach doesn't know anything" so in that case my granddad is quite frustrating, it stresses me out quite a bit.

Interviewer   With you wanting to impress your granddad so much do you ever find any, almost sorts of conflicts in what you think you should be doing and what you actually want to do?

MICHELLE   Yes I got advice coming from all directions off people that you trust and you know. Psychologically I'm quite balanced in that respect and I know who to listen to and who will get me there, who will help me progress.

Interviewer   Whose advice so you tend to find yourself listening to?

MICHELLE   Just my coach normally, I take advice from everybody else and listen to what they got to say but my coach is the one I take most from.

Interviewer   You mentioned your gran earlier, you said your gran's quite a successful athlete?

MICHELLE   Mainly she was the one who would babysit, take us to the park or whatever, played tennis with us but as I got older she realised I was more into football, she didn't know how to play football, she couldn't but she would come with my granddad and she'd watch me playing, training, watching and stuff.

Interviewer   Now, earlier on you talked about your social life and that type of thing, now obviously for a young teenage girl your social life will be quite an important part of it but do you ever get any support from your peers or do your friends help you as a developing player?

MICHELLE   My friends realise how important my football is to me and how much I have to give up so they're not, like "let's go out on a Friday, Saturday night" or whatever…typically all my friends go out on a Friday night will go out, come back, Saturday night go out, every night, college night they'll be going out to cinema, doing this doing that, not really caring, obviously with me training as much as I do I don't have a lot of spare time so they don't force me to go out, they don't go "why don't you just miss training?", they go "tell you what you go to training we'll make some spare time on Wednesday night when you're free, we'll go to the cinema or something" , rather than being "oh well if you're training you can't meet up with us" that sort of thing. So they in that respect they respect that I have to balance my life quite a lot so they help balance my life quite a lot so they make time for me rather than trying to get me to cancel training and stuff to see them, rather than trying to get me to do things that I shouldn't really be doing.

Interviewer   And how do you think that affects you in terms of your development as a player almost not having to make that choice almost?

MICHELLE   Psychologically I thinks its great because obviously when I go to training I know that my friends aren't behind my back saying 'she's ditching us for her football', that sort

if thing and they understand me and I think it helps me balance my life a lot more rather than me stressing between football, college work, social life, that sort of thing.

| Interviewer | All right, now you've mentioned 2 or 3 coaches as we've gone through, you've talked about your coach at [current team] and obviously your dad and [male coach], we will look at each of them and how do you describe your current coach for [current team]? In terms of how does he work with you, what type of advice does he give you, your relationship with them. |

| MICHELLE | Obviously as a team, she's a good coach, she's doing her own licence at the minute so a top quality coach and she does give us good advice as a team but every month or so she will have a one-to-one appraisal with us to sort out our, obviously my relation to her, she knows me as a person, knows how I like to be treated when we are dong certain work and stuff and how to treat me in the changing rooms, how to gear me up, that sort of thing. Obviously once a month we have our appraisals where we sit down and talk about where she thinks I am and where I need to be, what I need to do to get there, set me goals, targets, that sort of thing. So on a one-to-one basis we do that quite often. |

| Interviewer | I noticed you've gone through the levels at [current team] and certainly now you're kind of under 21's / seniors, does the type of support you get from your coach change in those different venues? |

| MICHELLE | From when I was growing up? |

| Interviewer | Yes, from when you were growing up and particularly recently? |

MICHELLE   Yes, definitely, obviously when I was more in the youth system it was a bit more chilled out bit more, it wasn't professional because you get girls coming and going, especially when we were 15/16, and then I think in women's football it's a lot of time when you're 15/16, when a lot of people drop out, you know, they'd rather be going out with their friends, rather be doing this, so obviously it wasn't taken seriously, obviously when I got moved up to the under 21's and they were the real serious girls and you know it was coaching, you can't be going out, you can't be doing this, you can't do this, you need to organised your life, that sort of thing so obviously as I've got older it has progressed and not only that time-wise, in the last few years women's football has got a lot better, and the knowledge and everything so in that respect it has got a lot better from when I was a kid.

Interviewer   In terms of [male coach], obviously [male coach]'s your coach at college, do you find any differences between working with a male coach at college and working with a female coach at your football club?

MICHELLE   Yes, I think there is a lot of difference, a big difference between working with male and female coaches. I think male coaches in general treat women's football the same as men's, for example we had this just this coach at [current team] the other week and we was doing this phase of play and he was making us do these 40 yard passes which no one could make, you know for some girls 20/30 yard passes are difficult never mind a 40 yard cross pitch drive on the ball or whatever. So in that respect when I'm coached by [current female coach] I find they treat us as women, treats us a women footballers rather than expecting us to be men! Whereas if you have men, you know, they'll be sat there saying "you're not quick enough", you know "if I were coaching men this would be a lot faster", but the thing is, you know, we're not men and temperamentally we're a lot different from men, so if a coach is sat there they need to know how to tell you that you're doing it wrong, because if they're sat there telling you how bad you are, you're doing it wrong, as a women your head it goes straight down because you're built differently to men.

Interviewer	So you prefer female coaches, is it a communication style that you tend to prefer?
MICHELLE	Yes.
Interviewer	So can I just clarify with you, what do you see as the biggest differences when you're coached by a male rather than by a female?
MICHELLE	The male coaches obviously they're used to coaching males a lot so they obviously tend to expect us to do things faster because that's what they're used to with men and when we can't they just tell us to do it better or do it faster and stuff like that and my head just goes straight down because you don't know what they expect you to do.
Interviewer	Alright, so its almost that they have different expectations and they know how to communicate with you a little better, the female coaches?
MICHELLE	Yes, definitely, I think the communication is a big thing, if someone's not communicating with you right, you don't have a clue what they are saying to you, obviously your personal relationship with them your going to be thinking they're not liking you, they're always criticising you, that sort of thing.
Interviewer	Do you think that your female coaches understand the needs of you as a female player a little bit better?
MICHELLE	Yes, I think so, obviously especially at our age, 17 year old girls, so you're a lot different from the guys, you've matured a lot faster but at the same time it's a lot bitchier, you know girls, emotions up and down that sort of thing. I think to control a female team is a lot harder than to control a male team, I think, yes.

Interviewer   And you get the benefit from a female coach being in that sort of situation.

MICHELLE   Yes.

Interviewer   Alright, ok, now your coach at [youth international] Colleges, I'm assuming that's a different coach again, so how does that coach tend to work with you, do you get anything from that coach that you don't get from your other 2 coaches?

MICHELLE   Definitely, I mean the coaches there, there's 3 different coaches and obviously they all do different things, the English College is a different standard, it's a different calibre of players so the coaching is totally different, training, you know, it's a higher intensity, the knowledge that they give is far more superior to example, some of the stuff we get at [current team] especially stuff that I get here at college, so it does range a lot from the type of coaching and the type of training that I do.

Interviewer   So what sorts of knowledge, to use your terms, do you get from your coaches down at [youth international]?

MICHELLE   Obviously the training that I do at [youth international], the training days and stuff, its all like, we never do technical duels, its all like phases of play, that sort of thing whereas when I step down to college its all like tricks and you know, like technical stuff and a lot of the girls aren't quite there and that sort of thing and so the training at [youth international] is far superior.

Interviewer   Ok, in terms of your different coaches, do you get any different types of support from the different areas or do you think you get the same sort of levels of support from there?

MICHELLE   I think we get the same, sort of similar levels of support, obviously when I'm down here at college obviously I've known [male coach] since I was about 9/10, he's seen me progress, he's a very honest man, he'll tell me what I need to do, whether I'm going to make it, that sort of thing, obviously the same with Jamie. At [current team], obviously I see the [current team] coaches quite a lot and one-to-ones every month and they're constantly telling me what to do, the only difference with the [youth international] coaches is they don't see us a lot, they see us really progress but what we're doing through our clubs and colleges, that sort of thing, so on the feedback issue, it's a bit different because they only see what you do there, so feedback it's a bit different but coaching is superior if that makes sense.

Interviewer   You use the term 'making it' there, you said your coach at college is quite honest with you about whether you will make it or not, what do you class as making it as a female footballer?

MICHELLE   Making it? Say, when you've just reached your potential, obviously I think my potential will be for making the premier league, maybe pushing further into national duties, like that sort of thing. I think as a player, you know when you've made your potential, I think you'd know when you've made it.

Interviewer   Do your coaches ever put you any sort of pressure to strive to 'make it' if you like?

MICHELLE   As such, I've never really had any pressure, obviously with me progressing quite early and moving up to the 21's, especially at a young age I haven't really experienced that pressure, if I'm honest, like to make it yet because obviously in football I am still quite young.

Interviewer   Do your coaches ever work with you differently in terms of training and games?

MICHELLE   What do you mean?

Interviewer   When you are talking to your coaches about your performance in training, performance in games, at your appraisals, do they ever work with you in a different way or are you ever encouraged to develop any different things?

MICHELLE   Obviously with me knowing the coaches that I've got, I've known them for quite a while, see [current female coach] I've had for 2½ seasons, been there at college for 2 seasons, so in that respect my progression has been quite steady, obviously all my one-to-ones and stuff, its been like this is what you need to improve on, this is what you've been improving on, and its quite similar things which I need to, obviously because I've known the coaches for that amount of time.

Interviewer   Can you give me a specific example of how the support you get from your coaches developed you as a player?

MICHELLE   For example, in our one-to-ones, I've been told at [current team] I need to work on my strength, I'll never make it to the first team it I don't work on my strength, so [current female coach]'s devising me a strength conditioning programme which I can do here at the gym at college, that sort of thing, combine it with my training at college, and ask [male coach] if I can go and do my strength workout, that sort of thing.

Interviewer   So that sort of information supports you. Alright, now you've mentioned a few times how female football differs from male football, as a female footballer do you feel that you face any obstacles in your development as a player?

MICHELLE   Feel I faced quite a few but its mainly because of the stereotypical you know, as a child I was growing up, I got bullied quite a lot when I was growing up, from the age of about 6 till I was about 11/12, you know, all the lads were like 'ah you play football, you're such a man….' that sort of thing and my first soccer team basically told my dad that I wasn't going to play because I was a girl, even though we were only like 11 so I could play on the same team as the boys. Obviously moving to [current team], which is an all, like when I was younger, really younger when I first started out at [local boy's football club] and everything, I was like "God, am I the only girl who plays football?", you know what I mean, obviously when I went to [current team] I discovered all these other girls were playing, I'm not the only one, that's when it started to open up, I realised you know, I could make something of this.

Interviewer   So the "stereo typical" type of obstacle - how did you overcome this? Did anybody help you?

MICHELLE   I would say the main people, obviously when I first went to [current team] and I realised that there was all these others, I would say the main people that helped me get past that were my team mates. I go to my new club and it was all girls and it was like "I'm not the only girl that plays football!" and they've been through the same thing as me with the lads, you know the bullying and stuff, l the lads, you know like saying stuff to them, bullying them and that sort of thing, so I'd say they were support because they're the ones that understood it when they'd been through it that sort of thing.

Interviewer   And you mentioned earlier about how your coaches had highlighted some areas that you needed to improve on certainly in terms of strength and things, do you know of any particular reason why they've identified that particularly, have you had any problem with injuries or anything?

MICHELLE   Yes, I've had quite a few injuries, I've torn my hamstring not so long ago, I've ruptured ligaments in my ankle that sort of thing, so in that respect, strength wise that what I need to improve with being injured as well you are out for how many months, your not training, your going to loose your physic, that sort of thing, so I think that's just the main.

Interviewer   All right, during those injury periods is there any techniques that you've been using to try and if you like still develop as a player without being to actually physically train?

MICHELLE   I'd say just, even when I was injured I used to go along to training, you know, I'd watch, I'd help [current female coach], like set up the kerns or whatever, just generally being with the team like on a match day, I'd go, I'd be involved in the changing rooms and I'd help out with the kit, be like music dj or if you like, that sort of thing, so I would say just being in the team environment sort of helped.

Interviewer   Along the same sort of lines really, do you think you've had to make any sacrifices to get to the level of football that you're at? Obviously you mentioned a little bit about the lifestyle that you have to lead, would you consider that to be a sacrifice?

MICHELLE   In some respects, obviously when, I don't know, if my friends 18th birthday party, I really sorry I can't go I've got training, that sort of thing, in that respect I'm like you know, she's my best friend that sort of thing, I can't go but on the other hand I'll be like who else plays in the [highest level of women's football], that sort of thing, I've got to push, so I really wouldn't call it a sacrifice but sometimes, especially when I was injured that was like more of a sacrifice because I was thinking when I wasn't training as much I was thinking, you know, this is what I could be doing, chilling out, not being as tired, concentrating on my college work.

Interviewer   Do you ever find any problems with the college side of things, do you ever have any problems that way with your football commitments?

MICHELLE   Yes, I've had quite a lot of run ins especially at college since getting in at [youth international], I've had to miss quite a lot of college, you know like going away, like we went to Ireland last year for a week, like going away, like we played Nottingham the other day so we had to go the day before, that sort of thing and like going down having to miss college I'd get my college tutors calling up my parents being like she's missing college and she'd be like who else misses college who would miss college for representing the country, that sort of thing and I'd get on all my reports I got [Michelle]'s attendance isn't good enough, she needs to catch up on the work she's missed that sort of thing, obviously as a teacher you don't see peoples other commitments like that, so in that respect I have had quite a lot of.

Interviewer   In terms of college and the education system that you're in do you think that's its more sort of positive or negative in terms of your development as a player?

MICHELLE   I'd say being at this college especially, its sort of benefited me obviously being able to combine my training with the development team and revolve it around my lessons but at the same time missing full days off college has affected my education and not only that but psychologically when I missed all my work and I missed a full weeks work and I come back and I got loads of A2 biology revision to do its like whooo my heads been blown up, I'm all over the place then I've got to get to training, when I'm at training I'm like ahh no I haven't finished that work for [part-time employer], that sort of thing.

Interviewer   So you tend to find you've got them conflicting interests?

MICHELLE   Yes.

Interviewer   Now we'll talk a little more about football specifically? What makes you a good

player?

MICHELLE   What makes me a good player? Technically I've got the natural ability, I've got the desire, commitment, I'm quite level headed I know where I'm at, where I want to be and how to get there, that sort of thing.

Interviewer   Alright, when you're in your football setting how do you try to show these quite positive attributes that you're talking about?

MICHELLE   I show it by playing, I'm not one of them players that go around telling other players that I'm better than them, that sort of thing, I'd just make sure everyone sort of play my own game, I'll be asking for feedback, that sort of thing, saying [current female coach], if [current female coach]'s put me on the bench whatever 'but oh [current female coach] but I thought I'd been playing really well' and then she would give me feedback, that sort of thing, so its more psychologically because everyone at [current team] is technically exactly the same, everyone's, I think its your mind which takes you where you want to go.

Interviewer   So, in terms of the psychology part, you've mentioned how important psychology is but what sort of main qualities do you think you've got in that sense? You mentioned commitment and you mentioned that you're quite level headed, but what sort of key psychological qualities do you think you've got?

MICHELLE   Obviously as I was growing up with my dad, him giving me all the goal settings, that sort of thing, obviously motivation wise, my heads been I know where I am, I know where I want to go, this is how I'm going to do it, that sort of thing whereas a lot of players they'll come to training, not know what they want to do, heads all over the place, thinking I'm going to go out tomorrow night, that sort of thing, whereas I'm quite straight lined, I know where I'm going, that sort of thing.

Interviewer   Obviously you've mentioned that your dad did a lot of goal setting with you when you were younger, is that still the case now or have you taken more of a lead in it?

MICHELLE   Mainly me who making it now so, when I was younger I used to think 'why is dad making me them goals?', that sort of thing, no-one else does that but obviously now I look back and I think actually its quite a good idea and when I hit 16 obviously he was like you need to take more of a stance on your own so I was doing it on my own, sort of like assessing it on my own, then on our appraisal I'll be going '[current female coach], you know, these are my targets, what do you think?', and she'd be 'Yes, I think they're achievable but maybe you need to make this one a bit easier to reach', that sort of thing.

Interviewer   How relevant do you think the psychology part of football is? A lot of the stuff you've talked about today has been you've got to be a good technical player, got to be strong, got to be physically strong, that type of thing, so how relevant do you think psychology actually is to football?

MICHELLE   I think it really is relevant, obviously at [current team] we've been through a few psychological like meeting things if you like, they'll take us in, show some strategies, how to calm yourself down, your arousal levels, everything like that, I think stuff like that makes you the player that you are, if your heads all over the place then you're never going to make, you know, you won't be able to achieve what you want to if that makes sense, on the pitch you're never going to, your concentration going to be all over the place, your not going to have the desire, the commitment.

Interviewer   And how important do you think that s been for you personally in terms of getting you where you are but I suppose its more than that keeping you where you are and getting you further?

MICHELLE   I think its really relevant, obviously being 18, being at college, I've think you've got to be quite psychologically balanced other wise, you know, you'll be thinking, you'll be at training thinking I'm 18, student night, why aren't I out in town, that sort of thing, so in that respect I think especially at the age and the level that I am, I think you've got to be quite mentally stable.

Interviewer   You've used the term 'psychologically balanced' a few times now, what do you mean by that?

MICHELLE   Obviously you need to balance your life, obviously I'm not all football, football, football, training, training, training, because I would just get sick of it, I'm not all do my college work, do my college work, I'm not all go out, you need to balance my life a bit so one day I'll be training, the next I'll be forget about training tonight, I'll have a rest, catch up on all my college work, that sort of thing. You see if you focus on something 100% you're just going to burn yourself out.

Interviewer   In terms of your general personal attributes if you like, why do you think you've been successful?

MICHELLE   Why? I think I've had the right environment to grow up in, I've had the right people around me, I've had the right contacts and I just think I've had the people around me to help shape where I'm going, what I'm doing, I haven't been forced, haven't been pushed like I see a lot of kids getting, you now, dads living the dream through them, forcing them to go and hating by the age of 14/15 so I think I've had a lot of quite experienced, knowledged people around me help, you know, guiding me.

Interviewer   In terms of all these different areas you've talked about, you've mentioned your commitment, you've mentioned your ability to balance your own life, and you've talked about how really now you've taken more control of that and interesting

you've mentioned these sort of sport psychology sessions that you've had at [current team], so how much time do you sort of spend now trying to specifically develop these different qualities that you've got?

MICHELLE   Psychologically? I wouldn't say I spend, like I don't sit there, you know, thinking psychologically this is what I have to do, its more preparation, that sort of thing, like I'll sit there before a match or if I'm driving there, imagining things, visualising, that sort of thing or I'll sit there on a night time watching TV, I'll find my mind just drifting about what I'm doing tomorrow, what I'm going to do in the changing rooms, you set things that I sort of like do to help me prepare.

Interviewer   Can you talk me through the set things that you do to prepare yourself? Is it just before a game or before training that you do it?

MICHELLE   Just a game, I say I get there, I sit with my ipod in, I have to sit in the same seat every time, I have a pre match play list I have to have on every single time, and I'll sit there for a good 5 minutes just on my own, obviously I'll get there and say hi to everyone, I be getting all my kit, I'll sit there and I'll imagine what I'm going to do and then another thing that I have to do left boot goes on before my right.

Interviewer   And why's that?

MICHELLE   Left footed!

Interviewer   All right, fair enough.

MICHELLE   Just a thing.

Interviewer   No, no, that's cool. And before training or during training do you ever find yourself using any of these different psychological skills that you've been taught?

MICHELLE   Yes, especially the visualisation one, especially if you're doing like phases of playing things and game relevant, that's when you're thinking 'on Sunday, Sunday this is what I need to do, this is the picture which I'm going through, need to get out there and whip the ball in that sort of thing'.

Interviewer   Do you see using these techniques that you've been taught, do you see them as more important during the game or during training do you think?

MICHELLE   I'd say in training more, you see in training you can be working hard but if its not relevant to the game, if you can't transfer what you've been doing in training to the matches I don't think you'll improve.

Interviewer   Thank you very much, I suppose really is there anything that I haven't asked you about specifically that you think has been an important part of your development as a player or do you think there is anything that will help you get to the next level if you like or help you to use your words 'help you to make it'?

MICHELLE   I think you've been through, over everything and obviously to help me make I think got the right people around me, it's down to me now you know, to use the people that I've got and get where I want to go.

Interviewer   Do you think its more sort of the environmental side of things that are going it to get you there as in the people around you and the setting that you're in, rather than yourself?

MICHELLE   Yes, well I think its mainly individual driven, I think I've got to be a bit selfish and use the people around me a bit more and be like, you know, like use them for myself

rather than, I don't know if that makes sense! But I've got to be a bit more selfish and be a bit more self driven and obviously I know I've got the people around me, I know I've got everything I need like psychologically coaching, my friends, my family, that sort of thing, I've got everything around me, I think I've just got to be more selfish and push a bit harder to make it.

Interviewer   Ok, very good stuff, thank you very much.

MICHELLE   No problem.

Appendix 7:

Ethics information from study three

Study three player consent form

A negative case analysis of talent development in UK female soccer

This study will involve you taking part in a series of in – depth interviews discussing your experiences as a female football player. The length of each interview will be determined by the amount of information you wish to discuss, but as a guide it is anticipated that each interview will take approximately 1 hour. The interviews will be recorded using a digital voice recorder. Your participation in this study is voluntary. You are free to refuse to commence the interviewing or withdraw at anytime during the proceedings. The results of the research may be published, but your name will not be used and no information that makes you personally identifiable will be included. All data collected will be coded to maintain anonymity; and any personal details along with the original recording will be kept in a secure setting with access being limited to myself and my research supervisor.

The benefit of taking part in this study is that you will be contributing to a body of research that will help to advance the profile of female football and help to further the understanding of the developmental processes of female football players. It is hoped that the findings will help to enhance talent development processes in female soccer.

Participant to complete:

I have read the informed consent form, study information sheet and interview guide. The nature, risks and benefits of the study have been explained to me. I understand that I am free to withdraw or discontinue my participation at any time without penalty or loss of benefit to myself, and without giving reason for doing so. I have asked any questions relating to my participation in the study and understand the answers provided.

Signed:.. Date:...........................

Print:.. Date:...........................

Researcher to complete:

I have explained to the above individual the nature, purpose and risks associated with their participation. I have answered any questions raised and have witnessed the above signature (s).

Signed:.. Date:...........................

Print:.. Date:...........................

Study three coach consent form

A negative cases analysis of talent development in UK female soccer

This study will involve you taking part in a series of in – depth interviews discussing your experiences of coaching female football players. The length of each interview will be determined by the amount of information you wish to discuss, but as a guide it is anticipated that each interview will take approximately 1 hour. The interviews will be recorded using a digital voice recorder. Your participation in this study is voluntary. You are free to refuse to commence the interviewing or withdraw at anytime during the proceedings. The results of the research may be published, but your name will not be used and no information that makes you personally identifiable will be included. All data collected will be coded to maintain anonymity; and any personal details along with the original recording will be kept in a secure setting with access being limited to myself and my research supervisor.

The benefit of taking part in this study is that you will be contributing to a body of research that may help to support coaches in their development of female football players, as well as enhance the profile of female football as a whole.

Participant to complete:

I have read the informed consent form, study information sheet and interview guide. The nature, risks and benefits of the study have been explained to me. I understand that I am free to withdraw or discontinue my participation at any time without penalty or loss of benefit to myself, and without giving reason for doing so. I have asked any questions relating to my participation in the study and understand the answers provided.

Signed:... Date:...........................

Print:.. Date:...........................

Researcher to complete:

I have explained to the above individual the nature, purpose and risks associated with their participation. I have answered any questions raised and have witnessed the above signature (s).

Signed:... Date:...........................

Print:.. Date:...........................

Study three teacher consent form

A negative case analysis of talent development in UK female soccer

This study will involve you taking part in a series of in – depth interviews discussing your experiences of teaching female football players. The length of each interview will be determined by the amount of information you wish to discuss, but as a guide it is anticipated that each interview will take approximately 1 hour. The interviews will be recorded using a digital voice recorder. Your participation in this study is voluntary. You are free to refuse to commence the interviewing or withdraw at anytime during the proceedings. The results of the research may be published, but your name will not be used and no information that makes you personally identifiable will be included. All data collected will be coded to maintain anonymity; and any personal details along with the original recording will be kept in a secure setting with access being limited to myself and my research supervisor.

The benefit of taking part in this study is that you will be contributing to a body of research that will help to understand the holistic experiences of female football players and may help to provide support to those tasked with enhancing the different aspects of a player's development, such as teachers and coaches.

Participant to complete:

I have read the informed consent form, study information sheet and interview guide. The nature, risks and benefits of the study have been explained to me. I understand that I am free to withdraw or discontinue my participation at any time without penalty or loss of benefit to myself, and without giving reason for doing so. I have asked any questions relating to my participation in the study and understand the answers provided.

Signed:.. Date:...........................

Print:.. Date:...........................

Researcher to complete:

I have explained to the above individual the nature, purpose and risks associated with their participation. I have answered any questions raised and have witnessed the above signature (s).

Signed:.. Date:...........................

Print:.. Date:...........................

Study three friend consent form

A negative case analysis of talent development in UK female soccer

This study will involve you taking part in a series of in – depth interviews discussing your friendship with [female football player] as you were growing up. The length of each interview will be determined by the amount of information you wish to discuss, but as a guide it is anticipated that each interview will take approximately 1 hour. The interviews will be recorded using a digital voice recorder. Your participation in this study is voluntary. You are free to refuse to commence the interviewing or withdraw at anytime during the proceedings. The results of the research may be published, but your name will not be used and no information that makes you personally identifiable will be included. All data collected will be coded to maintain anonymity; and any personal details along with the original recording will be kept in a secure setting with access being limited to myself and my research supervisor.

The benefit of taking part in this study is that you will be contributing to a body of research that will help to provide recommendations for the holistic support of female soccer players, which may enhance their chances of progressing their soccer career further..

Participant to complete:

I have read the informed consent form, study information sheet and interview guide. The nature, risks and benefits of the study have been explained to me. I understand that I am free to withdraw or discontinue my participation at any time without penalty or loss of benefit to myself, and without giving reason for doing so. I have asked any questions relating to my participation in the study and understand the answers provided.

Signed:... Date:...........................

Print:.. Date:...........................

Researcher to complete:

I have explained to the above individual the nature, purpose and risks associated with their participation. I have answered any questions raised and have witnessed the above signature (s).

Signed:... Date:...........................

Print:.. Date:...........................

Appendix 8:

Sample interview transcription from study three

Interviewer: Hi [Lizzie]. Thanks for coming in today. Today we will be doing an interview about your experiences developing as a football player. We're looking at things all the way from stating playing football, all the way through to when you finished playing with the centre of excellence. So the process will be an interview to start off with which will lead to some follow-up interviews later on. You've had the information letter and interview guide, are you still happy to take part?

Lizzie: Yes

I: Thanks [Lizzie]. So to start with, can you tell me how you got started with football?

L: In the area where I lived, there was just loads of lads who always kicked about and I hated watching and I wanted to join in, so one day I did and then just always did.

I: And can you tell me when you first started playing football?

L: It will have been when I was about 6 or 7. Erm…we lived on a hill which made it a bit harder, but all the more fun. Sort of fun in love with it then and never wanted to stop.

I: When did you first start playing organised football instead of it just being a kick about with the lads?

L: It was when I moved up () I would have been about 13 or 14. I started training and playing with the lads for about a year and then they got a proper girls team for us to join. …started playing real matches not long after that. When I first started it was 9 a side and then the season after that we progressed to 11 a side.

I: What was you involvement with football prior to that?

L: Erm…yeah…it was just a bit of a laugh, but then when I first moved up here I started playing with the lads but I couldn 't play any matches against them. Erm, so when I wasn't playing I would just come and watch and then have a kick around with them, or we'd come after school and have a kick about, I got some more of the girls from school to come down and we would all start having a kick about together

I: So when you first started playing organised football, did you spend a lot of time outside practising?

L: No, when first moved up we lived away from my mates so I spent all of my time in the back garden playing.

I: When you were younger did you play any other sports?

L: When I moved up here they didn't have a girls team so I started playing netball and hockey, erm, for my school…erm, I did a lot of competitions in athletics and stuff like that, but it was football that

was my main sport and my main passion, that was the main thing I enjoyed. I played netball for three years and stopped when I was about 15 or 16. I stopped playing netball when I started playing for [player development centre] because football got a lot more serious with the training and what-not so I just knocked everything else on the head. I would have been out every night for two or three hours before it went dark on top of that, I never gave myself a rest back then. I played about two or three games a week, between friendlies and competitive games.

I: So when you talked about the enjoyment and the passion, what was it about football that gave you that?

L: I think when I first started, it was actually more of a thing about that it was frowned upon that girls would play football and that was just wrong for me so I liked playing against the lads and being better than the lads; I liked taking them on and I liked making them look bad sometimes…being able to run faster than them and do more with the ball than they could. I just enjoyed the thrill of it, when I scored a goal or when I had skilled someone out of the game, all of that. It was that lot that kind of drove me. You know, even when we didn't even have a coach that would come down to coach us, we would organise friendly games against people just so that we could play and compete. It gave me the buzz.

I: And when you say it was frowned upon, why was that a factor?

L: I just think it made me want to do it more. I think if someone tells me that I can't do something, it always makes me want to do it more and a few people found that out the hard way. Erm, but yeah, where we lived all of the lads all thought they were the 'big I am' and they all used to tell me that I couldn't play and that I couldn't be at the same level as they were, so it just drive me on to try to better myself and always prove them wrong. It just created and gave me more passion for it.

I: You mentioned moving up a couple of times now, when you moved up did you find people's attitude in Yorkshire different from Liverpool?

L: Erm, not really. It was quite similar, if anything they accepted things a lot easier THAN THEY DID BACK Home but when it came to training with the lads it was still a 'no' to playing matches. Even with training games, they would always make me go in goal and things like that…I wasn't you know, allowed, because some of them were bigger than me and they probably thought that I would get hurt, but yeah…the likes of that, just stick me in goal or make me ref, it was still…like…as much as I was allowed to be involved with the matches and training and things, they still wouldn't let me do what I wanted.

I: So how did that affect your involvement with football?

L: Erm…it sort of spurred me on to do more and I was part of the setup of them getting a girls team before I moved off to my centre of excellence. Because I was training with the lads It sort of got a few more girls to come down because they could see that girls could play football, you know, they wanted to come down and watch games and then watch what was going on and then they wanted to come and be part of it, so we badgered and badgered and then we ended up getting a girls team. I think it [setbacks, feeling shut out by the lads, not being allowed to play sometimes] made me want to get more involved with football and get more girls involved with football.

I: Ok. Was there anybody that was particularly important that got you involved with football here?

L: Well when I first moved up, I lived next door to [male professional football player with a premier league football club] and I was playing with him a lot and seeing how good he was; I would play with him sometimes and see how good he was and see how fast he was, I got to really learn some stuff from him. You know, when he moved from [Championship club academy] to [premier league team] that had a big involvement because it made me want to be that sort of talent and work for that level of success.

I: So what did you take from him, being able to play with someone of that level when they were at home?

L: Erm, well it was just the general sort of how he played…whereas I used to just want the ball and want to run at people, I started to realise that there was more to football than what you can do with a ball, it is as much about what you can do without the ball…how can you influence tactics, how can you influence other peoples' positions even if you don't have the ball, what to do when you don't have the ball or what to do if you do have it in certain situation…he sort of gave me vision in a way…he made me see the game in a bigger picture than just what I could do with a ball and running past someone because I could do that really easily. Sometimes he watched me play when he was back home and taught me loads of things about the bigger picture really.

I: Ok, cool, and are you still involved with football now?

L: Erm, yeah. Not to the level that I used to be at all…but I still play 5-a-side recreationally, you know like just at the [social club] against some of the other girls at my village, just kinda of getting to grips with each other.

I: So what made you leave football before?

L: Well, it was when I started working. After playing for [centre of excellence] it was annoying because I had the chance to play for [Women's Premier League team] but I had to work on a Saturday and a Sunday so I couldn't play in matches. I was busy with lots of things during the week…like work

and College and stuff…when I was busy during the week I couldn't go training as much as I should have or as much as I wanted to so it kind of started to drift off then…there was girls that could go to training every week and could be available every week so they got in the team ahead of me. I ended up taking a step back and had to focus more on my College work and working more.

I: And when did you first start playing for your centre of excellence?

L: I was 16 when I first started at the [centre of excellence] but had been at [player development centre] for three years before that.

I: How did you find that step up in level?

L: It was……erm……different. It was a lot more structured; it became less about the fun element of football. Like at my clubs that I had played at before [recreational and player development centre] it was always more about the fun element, but the centre of excellence was more structured, there was a desire, it was more about fitness and tactics and everything that you don't get with a lower level team, it was more about winning.

I: That's interesting. What was the more important part for you, was it the fun, the developing as a player or was it more about the winning?

L: It was definitely more about the winning and the developing as a player. As much as I liked the messing about and the fun parts, I would always feel better after I had been at training for the centre because it was always structured…if there was something in that session that clicked, you know like 'wow…I've never thought about that' it was worth it because I thought that I had learnt something.

I: So why do you play football now then?

L: Now…well during that period that I stopped playing altogether, I came and I watched a match and never knew just how much I missed it. I thought to myself 'I'd give anything to be out there' so now I think I know that football is part of me. I know I won't be able to play, but I least I'm kicking a football and I can't never not play, if that makes sense. I missed being part of a team, I missed being part of a group of girls…you know…just finding like other players that you mesh well with…your style and their style working well together….just being able to play really.

I: So is it more about the social element, the competitive element?

L: Football has always been about competition for me. I don't like being second best but I have always just wanted to be the best. The social element now just makes it more fun. I still always want to walk away, even from five-a-side, always wanting to know that I did my bit.

I: Ok…so you have talked a lot so far about competitiveness and being a good football player. For you, what is a good football player? What made you a god football player?

L: For me, it is teamwork and vision. Being able to see things that are going on around you that other people can't see; see a play developing before anybody else seeing it developing and having the positional sense to be able to make that happen. You've obviously got all of the stuff About speed and strength and all that, but if you can't watch what is going on all around the pitch and know how that is all going to change, that is what makes a good player. Being able to anticipate it, being able to sense it before anybody else does. That is a good player.

I: Do you think there is a difference between what makes a good player in men's and women's football?

L: I do yeah, if you watch men, they are that more physical, that bit stronger and you will get women that can play as well as men but you get the men that are all about speed and that makes them better. You can watch women players who are all about speed and they are nowhere near as fast but they are just as accurate and precise as players. I don't think you see as many women players who can be *that* player who can just make anything happen, like a Ronaldo or a Messi, I don't think there are that many women players like that. I think that is part of the reason why women's football isn't as big as men's football and why we don't get as many opportunities, because we don't have those superstars so we don't advance the women's game as much.

I: So thinking back when you were 16, what was it that got you selected?

L: Erm…I don't know (laughs). I think it was probably my desire; whether it was a trial, a match or a training session, I always worked as hard. I was never selfish which was a problem that I had when I was younger and I think that being willing to play with other people rather than just make myself stand out was what got me noticed…you know, like when I used to just try to take people on whether I should have done or not, now I would always be looking for the opportunities to play other people on or whether I should take somebody on and then play someone else in depending on what I had seen unfold in front of me…what I did with the ball but also what I could do without it….I think that combination got me noticed.

I: That's interesting. Can you give me an example of that?

L: Well, like, I was always determined to prove a point…always wanted to show that I was good enough to play against anybody – boys, girls, whatever – I just wanted to show I was good enough…I would always look to take people on, just run at people all of the time because I wanted to prove that point of how good I was and how much better I was than them .I think that made me look like a really selfish player and made me look like I didn't want to play for the team so I think that is what probably

stopped me from being at the centre of excellence sooner than I did. I just wanted to prove that I was as good as and better than everyone else. I think that thought held me back, but developing as a player I had to get past that and I had to start seeing the big picture. Not only how good I was buy actually that I was just one part of a bigger picture and all of the pieces needed to fit for us to do well.

I: OK, so when you joined the centre, did you know where you could go with football?

L: Erm…sort of…I just knew that I wanted to go to the highest level that I could.

I: So, for example, were you aware of things like the Women's Premier League, Internationals, that sort of thing?

L: Yeah, sort of. Like I always wanted to play for England, that sort of thing. To do it I was just kind of being realistic when I knew that there was so many better players than me and I never really thought that I would be able to do it, as much as I wanted to do it or as much as I tried. There's players that are just out of this World when compared to me…but I did, I wanted to, I wanted to play for England and I wanted to learn as much as I could about the game…but I never thought I could.

I: What about playing professionally, like the Women's Super League.

L: Well I never really knew about it. I mean like, it turned out that one of them asked me to play for them but I didn't really know how any of that worked.

I: So let me just make sure I've got this covered properly, you were selected for an FA centre of excellence. Did you ever think to yourself that you might be good enough?

L: Well it was kind of like, I was on cloud nine when I actually got selected for the centre, so it was all going a bit fast for me. I found myself going in three years going from just getting started properly to being selected at the centre and it was all just going really fast. Plus it was like I was then at the point where I was having to start with work and that made things a lot more difficult…but yeah, I mean when I got selected I did want to push myself and I thought to myself 'maybe? Could I? Could I keeping proving the point to others about how good I was? Could I better myself even more?' things like that…whether I actually thought I could get there, I don't think so.

I: You just used an interesting turn of phrase there; you just said "having to start work". Why was it a priority for you to have to do that?

L: As soon as I turned 16 it had been me and my mum on or own for years and I wanted to help my mum out. To me that became more important than football. We didn't have any money so I had to help her out financially. My mum had had 16 years of struggling so I wanted to pay her back for it. She had taken me to all of my session, all of my matches and she had the faith in me to help me play

football and I wanted to pay her back, you know, she'd had 16 years really of my dad not being around and not having any money because of that so it wasn't fair on her and I had to pay my way really.

I: So, expanding on that then, what sort of role do you think your mum played in your development as a player?

L: I mean, she made it possible… I mean of my family were into football…you know not my mum or my dad or anyone, you know, we're a big family of girls so it was like, my mum was always supportive of me although she never really spurred me on to play, that was me…but she was always supportive…you know, if she wasn't working she would always do her best to take me to training and to matches; she would buy my boots and my gear and things like that you it was because of her that I could play really.

I: And you said your mum doesn't really have any interest in football?

L: Well I've finally managed to get her into supporting [English Premier League side] and she gets quite passionate about them, but other than that she couldn't care less. She become more interested and she'd take me to matches and stuff, she'd come and support me but I knew that if it was sunny she'd rather have been sunbathing with a glass of wine rather than watching me play football. You know, she admitted it herself, she didn't really care about the football but she liked to come along to support me because she liked to see her child doing what she loved.

I: How did your mum start to get into things more?

L: Well you know, like the first game she came to watch we were playing at (development centre] and she was amazed, she was just like really impressed and more interested than she thought she would be. She seemed to be quite overwhelmed when she started to see the level that we could play at.

I: So what was it that she was doing particularly that was demonstrating her interest more?

L: Well once she got over the shock [laughs] and got over the shock of some of the size of some of the German players that we were playing against, you know she just sort of started erm…talking about tactics and things with me more and would talk to [step-dad] about what I needed to do to be a better player. You know, she would start getting a bit annoyed during games asking things like why was I hugging the line when I should have been cutting back inside and why was I doing this one thing rather than doing that, and it wasn't until after the game that [step-dad] pointed out that she'd been doing this. I didn't really realise it too much until the end of the match but she did start to get the more interested in what I was doing and trying to read the game and say stuff, but she didn't really understand the game for toffee.

I: So you just mentioned your step-dad there, did your step-dad going play a role in your decisions about football?

L: Well, yeah, it did. I think it was probably one of the main factors in some ways, like if we were in different circumstances…like if my mum had someone else…I mean like if he had stuck around and we had been able to stay in our house and stuff, then I would most likely have stayed in involved in football but it goes back to what I said before, I needed to work really to support my mum. You know I had to kind of think what is more important here, and I had to choose work over football.

I: Ok, thanks for that, I could tell it wasn't easy to talk about. Do you need a bit of a break?

L: No, I'm ok, we can carry on.

I: Ok, thanks. So if we move now to when you moved up to the centre of excellence level. You mentioned earlier that you found it a bit of a jump in level from your previous playing level. Can you tell me how you managed that transition?

L: Well there was me and another girl from [same town] who had both been selected and we knew that if we were both really serious about it then we needed to step things up a gear, know what I mean? We knew we needed to do some serious work on our fitness and we would do two or three extra nights per week on top of our training and we started then also using like literally any spare minute we had coming down to the club working on our technical stuff. We couldn't really do much with it just being the two of us but we would come down here and do as much as we could. You know we didn't have loads of cones and they always took the nets down so we would use stuff like empty coke bottle to make goals and dribbling tracks and we would do things like set ourself different passing targets so that we could work out things like our passing range. We tried to do as much as we could down at the ground when it was empty, we would try to develop the things that we had been working on in training too.

I: And did you have anybody at home or anybody in your family that helped with your development as a player?

L: Yeah, I did…I mean like my uncle used to take me out all of the time because I was so sporty and I was into football, he loved football as much as I did and his son wasn't into it so when I moved up here he had that chance to play football with somebody. When I moved up he would go out running with me, he would come down to the club with me before training so that I could practice my skills and my shooting and stuff, then he would watch me whilst I practiced my free-kicks and give me some advice and things…you know all of the stuff that you know, counts in a match. I do think that helped as well.

I: Ok, cool. And when you first started at the centre of excellence, how did you feel about the change?

L: Erm…well I was intimidated at first as I…erm…well I didn't really think I belonged. I knew I wasn't an amazing player but I did think that I was pretty good and thought that I might be alright. But fucking hell, when I started some of those girls were just amazing…you know, these were youth international players who at 16 and 17 already had agreements in place to go play for top clubs…that turned pretty quickly from like a fear thing into being something that started to drive me…you know, like I wanted to be just as good as them one day. I think that I knew in all honesty that I wouldn't ever be, but I wanted to be.

I: So what was it that intimidated you?

L: Erm, well the other players' talent really. You know from going from training with loads to playing with girls and then to the centre of excellence and realising that some of these girls were just outstanding…you know it was hard for my ego…having to admit that I wasn't as good as them it really hurt at first.

I: Ok, that's interesting. And how did that manifest itself into the drive and determination that you spoke about?

L: Well, you know, I'd been selected and I wanted to prove that I deserved to be selected to play at that level. You know, I wanted to prove that I was willing to work hard enough to be at that level, you know like I wanted to prove that I could even just play on the same pitch as some of those players and try to do what they can.

I: So at that point you had started playing with and against youth international football players. How do you think that influenced your development?

L: You know, you look at them like when they're doing their warm-ups and would feel intimidated. But then when it would come to 'go' time, I just wanted to try make sure that my team was better than their team. You know, I would do everything to make sure that even if we didn't win, we would look like we could perform. I would do things like single out that one player in their team that looked the best during the warm-up and we'd give her some attention, make sure that they couldn't…they couldn't get anywhere near their best. You know, like just don't let them do stuff on the pitch that they wanted to do.

I: So you have said a couple of times now that you wanted to be at the same level as the youth international players. Once you had been exposed to that level of player, what was it you did to try to get yourself to that level?

L: Erm…I would always give 110% in training and whenever I could, as soon as training had finished, I would be back here [local football club ground] and I would be doing it, any night I could, you know repetition, repetition, repetition…everything we had been working on in training, repeating it over and over again…everything we had learned or anything that I had seen them trying to do…practice it and practice it until I felt like I was confident to try and pull it off in a game.

I: And when you started playing against that level of player, did that have any effect on your aspirations within football?

L: Erm…that's a difficult question! Erm, I think it did really, yeah. You know, I thought right from the off 'I'm never gonna be as good as these' and it made me accept that I would never get to that level. It never stopped me wanting to play but it is kind of like, well I'm never going to be there so at that point it became like 50/50 about whether I thought I would carry on fully. You know, if it hadn't have been for the stuff that was going on in my personal life, I might have stuck at it as a player.

I: So it is interesting that you have referred back multiple times to not being good enough and that seemed to happen as soon you moved up a playing level. What was it about that move up in the level of football that made you think you weren't good enough?

L: Erm…well I think it was when I saw the level of the other players, you know the talent that those girls had, not only in my team but also in the teams that I was playing against…you know I kind of felt a bit out of place and that was when I sort of said to myself 'I'm not going to be as good as them'…

I: Ok… can you tell me a little more about that or give me any specific examples to illustrate?

L: Erm…you know like, when we played against [leading centre of excellence] and I have never in my life lost a game as badly as we did then. Although it was a team performance, my performance just shocked me and it wasn't a case of how bad we were as a team, it was a case of how good they were. That was when I realised that I would barely touch the ball before I had lost it and that was when I realised that they were like [laughs] just fucking incredible and I could not ever see myself ever be able to compete against them….and this was in my first year at the centre!

I: Ok, so if you're in the first year and you're playing regularly, you're potentially playing against people older than you, right?

L: Well, yeah. We had two year age groups so I guess that would have been the case, yeah.

I: So would that mean then that by playing regularly, you were showing you could compete against people older than you?

L: [long pause, laughs]…you know, I have never thought of it like that and nobody has ever said that to me before either…it was never that kind of thing [laughs]…it never actually crossed my mind to think of it like that, I guess I just always wanted to be better than others and like, that was the problem…I guess I was always just more focussed on how advanced they were for their age as opposed to focussing on what I was able to do for my age.

I: Ok, thanks for that….

L: Yeah – cheers for that one! [laughs]

I: [laughs]…so you mentioned again there about your need to be better than everybody else, how did that influence your football career?

L: Erm…I'd like to think that it didn't contribute to me stopping football but if I am completely honest with myself sitting here now and thinking back, then yeah it was probably one of the reasons. I think that, you know, when I had gone from playing regular football, to moving to the centre of excellence, and then going to not being able to play or train as regularly as I wanted to because of work, then going to having to start games as a sub or not even get on the bench, seeing girls that you know were maybe not as good as me but were turning up all the time so got in ahead of me…and not feeling like I could compete with some of the better players, you know that was new for me and I didn't like it. You know, I think I had sort of done that slow…what is it…slow decrease kind of thing…I had gone from a starter who would play 90 minutes to someone who didn't play…I had started to notice changes myself…you know, my fitness had gone down, I wasn't as sharp as I should have been and I didn't like it. I think it was probably part of my decision to go.

I: And did you ever have any conversations with your coaches about things that you felt were affecting your football?

L: Erm…not really, no. You know I understood that they had a responsibility to the other girls that were making every training session and stuff, you know, the ones that were turning up all of the time and I understood why they were getting the starts and stuff. With that team there was a real emphasis on dedication and I understood that. I never wanted to question it because I knew it was competitive and that they were dedicated and I couldn't make the promise to be there all the time. You know when I wasn't in College or in lessons I'd work. You know I wanted to go [to football]; give me a choice of football or work and I'd pick football any day, but I didn't get paid [like male players of the same age and standard] and I needed to money...I understood when the coaches didn't pick me because I couldn't go training.

I: So, moving on a bit; you've talked a lot about your concerns regarding work and youth international players. As you were developing as a player, did you ever face any other factors that affected your career? How did you cope with those?

L: Well for me it was…it was always working, that was the major thing but as I got older I also started to pick up one or two injuries as well. As the older I got, the easier it seemed to be for me to get them as well. But you know, you do your best to overcome them. I guess the main one was when I broke my ankle when I was 15 and I broke my ankle when I was 15 playing for [development centre] two weeks before a semi-final but I just did my best to overcome it. You know, like, I thought the to myself 'I'm never gonna get this back' but I just worked really hard with rehab and I ended up coming back. You know, I wasn't as quick or as agile as I was before but I just worked to make sure that I could reach as close to that standard as I wanted to be. The injury didn't stop me from playing and if anything I guess it made me stronger and I just worked really hard to get back to the standard that I wanted to be at.

I: Great, thanks for that. So now we're going to move on to talk a bit about what it was like being a teenage girl as opposed to a teenage football player. So you're 16, you're in a centre of excellence, you're in College, what is it like?

L: [laughs]… erm well it is safe to say that I was a little bit naughty around that time – probably a bit earlier! You know, I had started going out more, started having later nights and I was going through that change…I would get myself into stupid states and not even knowing what I was doing…

I: What do you mean when you say stupid states?

L: Well, you know, like I would go out drinking and I would end up sleep-deprived, hungover, you know like at 16 it was definitely a point where my social life became more 'out' than 'in'…, you know, like out of the house more than in the house.

I: So when you say 'more out than in', do you mean just socialising with friend or do you mean things like going out drinking?

L: [laughs] I mean going out drinking…definitely going out drinking… you know going from that step-up when you are in school and then you go to College and you start to think that you're more of an adult. You know you think well I can start to go out now, I can go out, I can get my hair done nice, I can get my make-up on, I can go out into town and I can start having a few drinks, you know, meet your mates…things like that…and that became a big part of my life from about 16 onwards…you know like I even started smoking and stuff at that point which became even more of a hindrance.

I: How do you think those changes have influenced your football career?

L: Well some of the obvious stuff, you know like smoking has ruined all of the fitness that I had. I did try quitting and tried going to the gym and stuff like that more but I remember when I could run forever over the 90 minutes plus and not really be struggling but after I had been smoking for a bit and my lifestyle changed I would blowing after about 15-20 minutes…you know, like I would have a burning chest I would be out of breath and I would just…. You know I think back now and I just think myself stupid. I started smoking socially whenever I was out and yeah, it just went from there. You know, I was like 16 when I started going out in town regularly with my mates so it really all started going downhill from there.

I: Ok, and how do you think that other aspects of your lifestyle affected you?

L: Well…erm…things like I started missing training sessions because I was hungover, you know, like multiple, multiple times. I'd…erm…go to training with every intention of getting involved but when it came to it I just didn't have the stomach for it, I was always knackered, I couldn't run and stuff, half the time I just needed to throw up and would rather have just been in bed sleeping. It was that mentality that I wasn't used to – football for me had always been the most important thing and I would normally have put it before anything – and this was when I started to think to myself, you know, skiving training and stuff like that…fucking…that was just unlike me.

I: So, thanks for that…and did anybody ever chat to you about your lifestyle? Coaches? Your mum? Anybody like that?

L: Erm…yeah. You know my College tutors were actually the first people to really pick up on what was going on with me. My progress tutor actually sat me down in a tutorial and had chat through with me about what he thought I was capable and chatted with me about how I was living my life. He kind of helped me start to think about what I was throwing away by going out all of the time and just being hungover all the time. He started saying things like 'You can do all of this when you're 18 and when you don't have so much going on' and 'why don't you wait until you've got your diploma because you're just going to end up failing'…you know...I was working to get more money to help out my mum but I was just spending it all going out so ~I was then having to work even more to help my mum out, and he helped me to understand how that was impacting on my education a lot.

I: Ok, cool…and what about anybody within football. Did anyone in football speak to you about things?

L: Erm…no, not really, no. Erm…I would just find myself being dropped and it got to the point that didn't even really phase me… I was just like 'alright, ok'… I knew that was one of the consequences of not being prepared to…or not being able to train and stuff like the other girls, I couldn't find myself expecting to just keep walking straight into the starting 11. I mean, like that coaches obviously

knew I wasn't going training because they told me that's why I was being dropped and why I wasn't getting picked, but they never really spoke to me about it.

I: If you don't mind me saying, you appear to have taken these decisions to drop you or not pick you quite well. Was it ever a relief for you?

L: Well yeah, at times. You know, I didn't feel the pressure or the expectation of having to manage everything. You know the [centre of excellence] team is a really well respected team, they're known for not finishing bottom and losing all of the time, they get a lot of respect so not being selected eased some of that pressure…so in some ways it made my life easier because I didn't have as much to manage. I played in some friendlies and stuff which I could enjoy a bit more…which was strange for me and I noticed changing in me because my old mentality was that I never cared about whether I enjoyed it or not as long as we won, so I think noticing that I didn't care about winning anymore was another change that was important for me. I wasn't worried about winning anymore which I think affected the way I performed.

I: Do you think that benefitted your performance?

L: Erm…no, not really. I mean I was getting to play in like I guess our second team – like the ones who didn't really play in competitive matches, just friendlies – and like I think I maybe enjoyed that more but I didn't develop as a player. You know, I would do more things because there was less pressure and I would maybe try things that I wouldn't try in the first team because I was more comfortable, but I know that I would have definitely learned more if I had been playing in the first team. In the second team, the standards weren't as high, the players weren't as talented and the players hadn't reached anywhere near the standards that the players in the first team had. I don't think it helped me at all being in the second team, it was just more comfortable. If anything it probably made me worse because it was more social and I enjoyed it more socially and I was more relaxed, so I ended up socialising with them more! Development-wise, no, I wouldn't have said I got any better.

I: So you have touched on socialising a lot now. Did you mainly socialise with friends from inside football or friends outside football?

L: Erm…both really. You know the people I hung around with generally were into sport anywhere but just not necessarily football…erm…I kind of went out with my teammates a bit as well.

I: So did you ever have that group of friends who would suggest that you did others things that go out on the town if you had training or games the next day?

L: [laughs]…Nope. Never had that. [laughs]. I mean I think if I had that I would probably have benefitted. You know if I had spent the night running instead of getting drunk or working, definitely I

would have felt better come training or games – I would have felt more prepared, more ready…I think when I was playing in the 'first team' you know, they were serious about it, they were strict on things and that's how I used to be…but you know, in the 'second team', the girls weren't as serious because they were playing at a different level and for different reasons I guess, so then you would get quite a few girls who would be like, you know, 'let's get on it tonight' or 'we're going out tonight, do you want to come with?' you know…being fit for training was never really something that we thought about…I was never the case that we would stay in just because we had training or a game the next day.

I: Ok…you've said a few times that there were first teamers who were really serious. Did you ever pick up on things that they did differently to you?

L: What do you mean?

I: I mean like their behaviours, their lifestyle…anything that you think might be important really?

L: Well the biggest difference was that football was their priority…you know, a couple of times we would even ask them if they would come out [into town drinking] with us but they would be like 'you know we've got a game tomorrow?' For them it was just normal that they stayed in that they didn't go out drinking…you know, they would want to be awake, alert, ready for the game and they took it seriously, they didn't want to be thinking about what's going to happen to last night's kebab when they're running!

I: [laughs] Ok so we've talked a lot about you and your parents, team-mates etc. now but an important person in any player's life is the coach, so we'll move onto your coaches now if that is ok?

L: Sure.

I: So have you mainly been coached by male or female coaches during your career?

L: Erm…pretty much all male coaches really. Certainly at the higher levels, it has been all male. Just one female at my local team.

I: And have you ever thought there would be any problems or any benefits to females being coached by male coaches?

L: Yeah, definitely.

I: Can you give me any examples of what made you say yes?

L: I think maybe it might be a bit unfair of me to say it, but when I was younger the woman that coached us just wasn't very good. You know it was just disorganised and it just turned into having a

kick about all of the time for 30 or 40 minutes. That might be a bit unfair because she was just helping out and she wasn't anywhere near as qualified as the men that have coached me, but as I've got older being coached by the men at like the centre and stuff, they seem to be much more organised…from start to finished there has always been a plan, to work each part of the body each part of the game etc. and we always have to make the most of the time that we got.

I: So do you think that was a difference between male and female coaches, or a difference between the levels of club you played for?

L: I mean like, yeah…massively at the centre it was like even miles more disciplined even that the player development centre that I played for…you know, that was like at the centre of excellence…you were there to play and you were there to train whereas even like at the player development centre it was a more fun element to it…but at the centre of excellence if you weren't turning up ready to train then there was no point even being there. It's that sort of sentiment that does make you a better player when you're at the centre of excellence; you have to do what you're supposed to do rather than mucking about because that is how you improve as a player. Making that change sometimes was really difficult.

I: It's interesting you've said that. You've mentioned different difficulties during the interview – moving to a new city, your home life, school to College and now moving up playing levels in football. Did you get any support from people in football when making this transition in football?

L: Well, you know, moving all the way from kicking about with a group of lads on the street all the way up to playing with and against youth international players was a big shock to the system when I think back. Just little things that I found weird as I moved up through the levels, even silly stuff like people paying attention to making sure the balls were pumped up properly and that the goals were set up right, stuff like that was weird at times…you know like people using football terminology as I moved through the levels mainly from the player development centre to the centre of excellence was a big jump, I didn't have a clue what they were talking about half the time! They did try to provide a lot of support because I think they knew that you were going from one level to the next and the likes of you know, extra training sessions, extra help…yeah…we had stuff like that.

I: So what do you mean when you say 'extra help'? Can you give me any examples?

L: With centre of excellence they started to throw on different types of sessions for people who felt like they needed help with different things…you know like fitness and stuff…and they'd never drop anybody's names who said that they needed help with different stuff and they would never really try to force us to get extra help, and they made the extra stuff feel like it was just a normal part of your training, they made you feel like you were getting more confident with stuff that you had identified as

things you needed to work on…they would give us different scenarios and we had to think about how we could use different skills or what we would do in different scenarios, so they would always be able to help us out with stuff like that.

I: Ok, cool, thanks. Now I asked the question earlier about whether your coaches would have any influence or input into things like your lifestyle choices etc. and you spoke about your teachers picking up on things and also said that your coaches noticed when you missed training a lot. You've just been talking about extra help and advice that the coaches gave with fitness, skills and tactical stuff; did your coaches ever have any communication with you about your lifestyle and things like that?

L: Yeah…erm…at the end of every match we would be told about the areas that we need to work on and we would be given a pat on the back for the things that we had done well during the game. We would be told about things that we would need to do to improve as a player.

I: So, do you mean that as football performance related feedback? Was that given to individuals or the team as a whole?

L: The feedback given as a team but we…erm…when he was telling us we would be in a team but he would go round us all individually. He would always give us the option though to say if we wanted to speak to him privately. We would all know anyway who had a good game or a bad game so we were never really bothered.

I: Ok, so that is all still quite performance related, was there anything non-football specific that your coaches would ever talk to you about?

L: Erm…no, not really. You know, I had those coaches who would be the like type of coach who would stand there and give us a bollocking from the sidelines so as a team we would usually listen more to the other coach. Sometimes we would have one of the coaches who would stand there and give us 90 minutes of solid bollocking during a game especially if he knew we had been out whereas the other would be giving us some bad, some good…so we would listen to him more [laughs]…we found that like, we would listen more to the one who would give us a pat on the back rather than the one that just gave us 90 minutes of bad stuff.

I: So it's interesting that you had two coaches that were so different. Did anybody ever speak to the coach about why he would give you "90 minutes of bad"?

L: Erm…well it was difficult…it was bad for morale during the match…we would just try not to listen to him and even if we thought that he had a point we would tend to just not listen to him. During the game when you're doing the best and trying to work as a team, you don't want someone just

shouting at you and telling you that you're doing stuff wrong for the full game. You know, sometimes we would even turn round to him and say "why don't you come on the pitch and do it" and we would try to keep each other going as a team and try to give each other feedback about how we could improve because getting screamed at didn't help us at all.

I: So I guess this was a source of conflict with your coaches, did it carry on after matches?

L: Yeah, it definitely led to a few telling offs" [laughs] A few suicide runs as a punishment but it always led to an apology. You know, we were quite an open team as a bunch of girls so we just told him what we thought and sometimes that might lead to us or him apologising and sometimes it wouldn't. I think it clicked eventually that if he gave us a bit of good and a bit of bad; we were more likely to listen to him [laughs].

I: [laughs] so, you spoke earlier about how you felt different types of pressure playing in the first team and the second team. Did you coaches ever contribute or alleviate that pressure?

L: Well in the first team there was always favourites in the team and that always gave you that added pressure. You know, the pre-match speech would always be 'get the ball to [youth international]' or 'get the ball to [other youth international]' and as soon as you got the ball during the game you'd be getting screamed at to get the ball to them quickly and sometimes only them...you know you weren't allowed to play your own game and that was a bad situation.

I: So you used the term 'favourites' there. What do you mean by that and what made you think the coaches had favourites?

L: It was erm, like, always a constant, we knew the girls that were great anyway…but we didn't need to be told every training session and every team talk just how great they were and how we should always watch them and try to be like them….

I: How did you know how 'great' they were?

L: Just from how amazing they were with the ball but we knew that ourselves. We knew what they could do on and off the ball, we knew what they could do from corners or free-kicks, we knew how much more than all of us that they could do – that's why they were youth internationals – we knew how good they were but to be told just as soon as you're on the ball just to give it to them, it's not going to help us to get any better, it's just going to help them to keep showing how good they are…by all means the coaches should give us advice and they should be helping us to learn how to get better, but they shouldn't be giving us orders to basically get rid of the ball as soon as we could. I think they should have encouraged us to play our own game more, rather than just give the ball to [youth international] or [youth international] all of the time.

I: Did your coaches' behaviours influence how you played? I mean, you said earlier that you would always try new things in games so I'm just trying to get a sense of where you were with your game, with you just saying that the coaches would always tell you to move the ball on quickly.

L: I mean, yeah, it was…erm… I didn't feel like I got a proper…you know… go at things. With the first team, I wasn't as confident as I was when I first started. I felt like I couldn't really show anyone what I was capable of because I was constantly being told to play this way or pass to them, you know, I was never allowed to use my own imagination or my own kind of knowledge of the match to show what I was capable of.

I: And did you ever go and talk to your coaches about that? Did you even feel comfortable to go speak to them?

L: Yeah, I spoke to one of them. One of them was great, he understood and he recognised himself what was going on you know, he knew they always wanted us to feed the ball to them as soon as we could. I think part of the problem was that he didn't coach us as much as the other and he didn't have as much say. He noticed what was happening and myself and other girls had spoken to him about it. You know, there was the odd game when he was in charge and it was like a completely different team…you know, you were allowed to use things like initiative for a change!

I: So from what you are saying, this wasn't that coach that was causing the problem?

L: No, not that one.

I: Ok, so did you ever feel able to go talk to the coach that was causing the problem?

L: Erm, no. I think that it was more of a…erm….as a team we kind of thought that it was like talking to a brick wall. We all thought we could tell him, and we did sometimes, and he would be like 'yeah, you're right' but then it would come to training or games and it would just be the same thing again. It is who he is, it is what he does, it was a case of like we could…a couple of times, we approached him and some of the other girls other than me had said something to him and he said that he had listened but he never actioned it.

I: Ok, thanks. And did your relationship with your coach affect you playing for the team?

L: Erm…I guess yeah. You know, like I said that I didn't feel like I could do anything and we weren't allowed to use our initiative or our imagination but at times it got worse. Like because he just didn't listen or like said he was listening but didn't do anything about it, I just didn't feel like I was part of a team…like I didn't belong in the team…you know, all this 'pass to them, pass to them' I didn't ever feel like there was an opportunity for me to be part of a team. You know like I said before, I didn't care sometimes of we won – as competitive as I was – as long as I was getting the best out of myself

and my coach was getting the best out of me and I just don't think that he did that because of all this 'pass to them stuff'. It was really getting me down, I didn't enjoy football and I think it was really detrimental to my performance, not just mine, a lot of the other girls as well.

I: So do you think that your coach was more interested in helping players develop or winning?

L: Erm…winning, definitely winning. Don't get me wrong, there was a few girls who would get a lot of help and lots of advice on how they could develop, they got lots of attention from the coaches. You know, the coaches know talent when they see it and I think tha affected who got the most attention when it came to their development as a player.

I: So was there a particular pattern to this? You said sometimes players got lots of attention?

L: It was always the girls that were the best players….I means they were lovely girls and they were fantastic players, they were extremely talented, you know I guess in some ways I could understand why they got extra help and extra attention, it was the coach's job to make us the best players he could and he always liked having the best p[layers around, but that was what also made me unhappy…you know…being part of a team where the coach was only really bothered about the same three or four players….the top performers, the youth internationals…every match player of the match etc.…always the same players.

I: So if I was to say to you, did your coaches help you to develop as a player, what would you say?

L: I think if I had stayed the course and put everything into they would have; I did notice a difference not long after I moved up, I felt like I was getting better. You know, with one of the great coaches that we had, at the end of a session I felt like I had achieved something and I would start thinking to myself how I could put that into my play and into my game. Towards the end of my time at the centre of excellence I did wish that I had been more committed and would like to think that things would have gone differently, you know being able to play at the level that I wanted to play at, but it wasn't to be.

I: So when did you finally stop altogether?

L: Erm…not long after I turned 17. Sort of like completely lost all interest…well not all interest…but by that point the commitment, the determination, the drive for football had all gone because I had lots of other things going on.

I: Ok, and did your coaches ever encourage you to try to develop or regain these things? Did they ever offer any psychological support in your preparation?

L: No, not whilst I was there…not unless it was one of those that I skived or that was only offered to the youth international girls. One of the coaches briefly touched on the importance of mental preparation and saying that you had to mentally prepare yourself for games, you know saying things like making sure that we stayed composed and telling us to relax…but we never really did anything to develop stuff like this, we were just told to do it. You know, like being told to relax before we took penalties or to relax before big games, but that's about it.

I: Did they ever use any techniques with you to help with these things?

L: Erm…they just told us to relax really. I mean I knew about imagery from my course at college and I used that before I took penalties but if I hadn't done it at College I wouldn't have known about it.

I: Do you think that psychological preparation is important in football?

L: Yeah, definitely. If you go into a match and you're worked up or your mind is on personal tings outside football or on College or whatever then yeah, I think it does affect your game. You see that a lot, particularly with us lot, when something was going on outside football then we wouldn't be at our best.

I: You just used the phrase there 'personal things going on' – was that something that affected you when you were playing?

L: Yeah, there was a couple of occasions when I was more worried my home life and more focussed on how to fix that than I was how I should go on performing in a match. It could have been a really important game but if my mind wasn't there then you weren't going to get anything out of me in the match. I would always try to just put things to the back of my mind but I would notice things like giving the ball away more and things like that. As much as I would be trying to put it to the back of my mind, I would actually end up noticing it more when I was doing stuff wrong...you know like in the build up to the match and during the match, it would just take over.

I: And did you ever get any help or support from your coaches with that sort of thing?

L: Well it wasn't necessarily like before the matches and stuff, but if I had things going on at home I would tell the coaches that I couldn't make training or that I wouldn't be available for matches and they would be fine about it, they were ok with it,… they wouldn't necessarily ever talk to me about stuff but they would understand and they would listen, you know, they were understanding if you had other stuff going on but they didn't ever really offer any advice or anything.

I: Ok thanks for that. Just finally then, if you don't mind me saying, you have talked quite positively about your passion for football and I'm getting the sense that you would still like to be involved. Does the future hold anything for you in football?

L: Erm…well now I have a work pattern where I get to have every second weekend off and I finish earlier because I'm working full-time. I'll never play at a level again because I'm too far down the road for that, but I am getting back into 5-a-side now and I want to start playing 11-a-side. The desire and the passion is there again but the fitness and the ability definitely aren't! [laughs]. If I can get back to playing like a local 11-a-side, that would be great, but I won't be able to have like a full career because I work full-time. You know it has been interesting just talking about things through this; I think like now, I know that if some of the personal stuff hadn't happened with my mum, if I hadn't had to try to squeeze in College and working as well as training and matches, perhaps I might have done better….maybe if I had been able to say to people…you know…'I can't afford to be spewing up tomorrow so I'm staying in tonight', maybe if I'd been a different type of person, then maybe I could have made it or at least had a better chance as a football player. With hindsight, I would have had a better chance.

I: Sorry, I know I said 'finally' before my last question, but you just said 'maybe if I'd been a different type of person', I'm just interested what you meant?

L: That's ok. I mean like, when you look at me here or if you looked at me in College or at work and then looked at me on the pitch, when I was on the pitch I felt like I was a different person, you know? I was giving everything 110%, I was determined, I wanted to be there whereas outside football it kind of feels like I just do everything because I have to, you know? I worked because I needed to help my mum out. I had to crack on with College because my tutor told me I was risking throwing everything away if I didn't. So when I said about being a different person, I meant that football made me a different person, it made me someone who was…you know…determined and passionate but I just didn't or couldn't use that in everything else. I know I'd rather be a football player than what I am now, I never wanted to just play Sunday League, I want to play in the Super League, but that's just an old dream now.

I: Ok, that's great. Thank you very much for your time today. When I've been through your interview I'll give you a bell so we can have a chat through the findings and I might want to have another chat with you about some of the things that have come up. Are you still ok for me to do that?

L: Yeah, sure. Thanks for letting me talk about it, it's been fun.

I: That's great.

Appendix 9:

Ethics information for study four

Gatekeeper consent e-mail

Player assent questions

Flyer for requesting clubs

Adam Gledhill
School of Sport, Exercise and Health Sciences
Loughborough University
Loughborough
Leicestershire
LE11 3TU

[Date]

E-mail subject: Talent Development in Female Football.

I am a Ph.D. student at Loughborough University completing a programme of study examining talent development in female football; with a view to enhancing the talent development experiences of child, adolescent and youth football players. The over-arching aim of this programme of study is to inform the talent development practices of those working with developing female football players to contribute to a sustainable and successful future for the sport.

I am writing to you as I seek participants for a study that looks at the impact of a young player's talent development environment on their aspirations, beliefs and intentions to become an elite level football player. The survey is aimed at players between the ages of 13 and 21 and will involve the players filling out an online survey that will take approximately 20 - 25 minutes to complete. In accordance with Football Association child protection guidelines, I will not make contact directly with any player under the age of 18 and at no point during the data collection will personal contact details of any of the players in the study be requested.

Upon the completion of the project the research team aim to present this study at an appropriate international conference and will seek publication in a recognised international journal. Although – due to the safeguarding procedures highlighted above – we will not be able to provide any information specific to your player development centre, we will be happy to provide a copy of the final research report.

If you feel that you are willing for your player development centre to participate in this project, or you would like further information on the study please contact me by either e-mail at Adam.Gledhill@leedsbeckett.ac.uk or by telephone on xxxxxxxxxxxxxxx. Should you wish to contact my research supervisor, Dr. Chris Harwood at Loughborough University, he can be e-mailed at C.G.Harwood@lboro.ac.uk

If you are happy to proceed with the project, may I ask that you send the survey link on to the players (and parents if players are under 18) at your centre so that they can decide whether they wish to provide consent and assent to participate in the project. Should parents not wish to consent to their child's participation in the study, or should any player not wish to provide assent to the study, they are asked to simply ignore this request and not complete the survey.

If players are happy to be involved with the study, the survey can be accessed via the following link: https://www.survey.lboro.ac.uk/tdwf/

Yours sincerely

Adam Gledhill

Examining the Talent Development Environment in Female Football

Child and young person's assent form

The following survey is designed to help us to understand your thoughts about being a female football player. We would like you to complete this survey because it might help us to support talented female football players in future to enjoy playing football and to try help give them a better chance of becoming a top level female football player. It will take you about 20 – 25 minutes to complete this survey.

We will not ask you for your name or the club you play for; we would only like to know your age and the type of club you play for. This way, you know that your results will be kept private. We will add your results together with everybody else's so that we can get an overall opinion about being a female football player. Nobody will be able to see your individual results.

If at any time you want to stop filling in the survey, you can close it down by pressing the cross in the top right hand corner of the screen. This will mean that you are no longer taking part and all of your results will be automatically deleted.

My age is:

The type of player development centre that I represent is:

FA CoE [Tick box] FAWSL Development Squad [Tick box] International age group [Tick box]

FAWSL first team Squad [Tick box]

I know what the 'Examining the Talent Development Environment in Female Football' study is about.

I understand what taking part involves.

I know that all of my answers are private.

I know that you will write a report that will include the things I tell you.

I know that I do not have to answer all of the questions.

I know that I can close down the survey and none of my results will be saved.

I know that no one will mind if I want to stop answering the questions.

I am happy to take part in the 'Examining the Talent Development Environment in Female Football' research [Tick box]

Examining the Talent Development Environment in Female Football

What is the purpose of the study?

- This study is being conducted by Loughborough University to understand female football players' thoughts on their talent development environments and career aspirations, with a view to enhancing the developmental experiences of elite female football players.

What do I need to do?

- Complete a survey online, **anonymously**. The only details stored are the age of the player, the type of club, and the answers to the survey questions. **You will not be asked for your name or the name of the club you play for.**

What are the benefits?

- We aim to publish the findings in appropriate outlets upon completion (e.g. appropriate conference, journals, FA coaching magazines, contribute to CPD events) that will help to inform how talented female football players are developed.

Where can the survey be found?

- The survey can be accessed at the following link: https://lboro.onlinesurveys.ac.uk/tdwf

When do I need to complete it by?

- We would appreciate you completing the survey before Saturday 21st of February

Who should I contact if I have any questions?

- The Lead Researcher is Adam Gledhill and can be contacted via e-mail at Adam.Gledhill@leedsbeckett.ac.uk

Appendix 10:

Surveys used in study four

Basic Needs Satisfaction Scale in Sport (Ng et al. 2011)

	Not true at all			Somewhat true			Very true
1. In football, I feel close to other people	1	2	3	4	5	6	7
2. In football, I feel that I am pursuing goals that are my own	1	2	3	4	5	6	7
3. I feel I participate in football willingly	1	2	3	4	5	6	7
4. In football, I get opportunities to make choices	1	2	3	4	5	6	7
5. In football, I feel that I am being forced to do things that I don't want	1	2	3	4	5	6	7
6. I can overcome challenges in football	1	2	3	4	5	6	7
7. I show concern for others in football	1	2	3	4	5	6	7
8. I choose to participate in football according to my own free will	1	2	3	4	5	6	7
9. In football, I have a say in how things are done	1	2	3	4	5	6	7
10. There are people in football who care about me	1	2	3	4	5	6	7
11. I am skilled in football	1	2	3	4	5	6	7
12. I feel that I am good at football	1	2	3	4	5	6	7
13. In football, I can take part in the decision making process	1	2	3	4	5	6	7
14. I get opportunities to feel that I am good at football	1	2	3	4	5	6	7
15. In football, I really have a sense of wanting to be there	1	2	3	4	5	6	7
16. In football, I feel I am doing what I want to be doing	1	2	3	4	5	6	7
17. I have the ability to perform well in football	1	2	3	4	5	6	7
18. In football, there are people who I can trust	1	2	3	4	5	6	7
19. I have close relationships with people within football	1	2	3	4	5	6	7
20. In football, I get the opportunity to make decisions	1	2	3	4	5	6	7

Careers in Soccer Scale

	Strongly agree	Agree	Agree a little bit	Disagree a little bit	Disagree	Strongly disagree
1. Do you aspire to have a career as a senior international soccer player?	1	2	3	4	5	6
2. Do you aspire to have a career as a Women's Super League Division 1 player?	1	2	3	4	5	6
3. Do you aspire to have a career as a Women's Super League Division 2 player?	1	2	3	4	5	6
4. Do you believe you have the ability to have a career as a senior international level player?	1	2	3	4	5	6
5. Do you believe you have the ability to have a career as a Women's Super League Division 1 player?	1	2	3	4	5	6
6. Do you believe you have the ability to have a career as a Women's Super League Division 2 player?	1	2	3	4	5	6
7. Do you intend to pursue a career as a professional female soccer player?	1	2	3	4	5	6

Talent Development Environment Questionnaire

	Strongly Agree	Agree	Agree a little bit	Disagree a little bit	Disagree	Strongly Disagree
1. My coaches care more about helping me to become a professional/top level performer, than they do about having a winning team/performer right now						
2. I am being trained to be ready for almost anything that is thrown at me in sport and life						
3. If I got injured I believe I would continue to receive a good standard of support						
4. My school/college/university don't really support me with my sport when I need it						
5. All the different aspects of my development are organised into a realistic timetable for me						
6. It is unusual to get specific training to teach us how to make good decisions under pressure						
7. Me and my sports mates are told how we can help each other develop further in the sport						
8. I can pop in to see my coach or other support staff whenever I need to (e.g. physiotherapist, psychologist, strength trainer, nutritionist, lifestyle advisor etc)						
9. I am rarely encouraged to plan for how I would deal with things that might go wrong						
10. My coach is good at helping me to understand my strengths and weaknesses in my sport						
11. Strength and conditioning training is specifically incorporated into my programme which is helping me get strong and fit for my sport (e.g. weight training, press ups, sit ups, body work, circuits etc)						
12. My coach is good at helping me to understand what I am doing and why I am doing it						
13. I struggle to get good quality competition experiences at the level I require						
14. The advice my parents give me fits well with the advice I get from my coaches						
15. My coach takes my whole life situation into account when planning my programme						
16. My coach constantly reminds me what he/she expects of me						
17. My coach doesn't often mention mental skills, such as imagery, positive thinking, coping with disappointment, competition routines, goal setting etc						
18. My coach and I talk about what current and/or past world class performers did to be successful						

	Strongly Agree	Agree	Agree a little bit	Disagree a little bit	Disagree	Strongly Disagree
19. My coach doesn't appear to be that interested in my life outside of sport................ 19	☐	☐	☐	☐	☐	☐ 19
20. The more experienced I get the more my coach encourages me to take responsibility for my own development and learning................ 20	☐	☐	☐	☐	☐	☐ 20
21. My development plan incorporates a variety of physical preparation such as fitness, flexibility, agility, co-ordination, balance, strength training etc 21	☐	☐	☐	☐	☐	☐ 21
22. If it didn't work out for me here, there are other good opportunities that would help me to keep progressing in my sport................ 22	☐	☐	☐	☐	☐	☐ 22
23. My coach and I regularly talk about things I need to do to progress to the top level in my sport (e.g. training ethos, competition performances, physically, mentally, technically, tactically)................ 23	☐	☐	☐	☐	☐	☐ 23
24. My coaches and those who support me give me straight answers to my questions.......... 24	☐	☐	☐	☐	☐	☐ 24
25. I don't often get any help from more experienced performers................ 25	☐	☐	☐	☐	☐	☐ 25
26. Those who help me in my sport seem to be on the same wavelength as each other when it comes to what is best for me (e.g. coaches, physiotherapists, sport psychologists, strength trainers, nutritionists, lifestyle advisors etc)................ 26	☐	☐	☐	☐	☐	☐ 26
27. Developing performers are often written off before they have had a chance to show their real potential................ 27	☐	☐	☐	☐	☐	☐ 27
28. My coach and I often try to identify what my next big test will be before it happens...... 28	☐	☐	☐	☐	☐	☐ 28
29. My training programmes are developed specifically to my needs................ 29	☐	☐	☐	☐	☐	☐ 29
30. Currently, I have access to a variety of different types of professionals to help my sports development (e.g. physiotherapist, sport psychologist, strength trainer, nutritionist, lifestyle advisor etc)................ 30	☐	☐	☐	☐	☐	☐ 30
31. The guidelines in my sport regarding what I need to do to progress are not very clear.... 31	☐	☐	☐	☐	☐	☐ 31
32. I don't get much help to develop my mental toughness in sport effectively................ 32	☐	☐	☐	☐	☐	☐ 32
33. My coach rarely takes the time to talk to other coaches who work with me................ 33	☐	☐	☐	☐	☐	☐ 33
34. I have the opportunity to train with performers who are at a level I am aspiring to......... 34	☐	☐	☐	☐	☐	☐ 34
35. My coach rarely talks to me about my well-being................ 35	☐	☐	☐	☐	☐	☐ 35
36. Feedback I get from my coaches almost always relates directly to my goals................ 36	☐	☐	☐	☐	☐	☐ 36

	Strongly Agree	Agree	Agree a little bit	Disagree a little bit	Disagree	Strongly Disagree
37. Organisation is a high priority to those who develop my training programme						
38. My coaches ensure that my school/uni/college understand about me and my training/competitions						
39. I am regularly told that winning and losing just now does not indicate how successful I will be in the future						
40. My training sessions are normally beneficial and challenging						
41. I get the impression that my parents get frustrated if I lose						
42. I regularly set goals with my coach that are specific to my individual development						
43. I am involved in most decisions about my sport development						
44. My coaches make time to talk to my parents about me and what I am trying to achieve						
45. My parents are there to support me in many different ways if I need it (e.g. talk to me, financial, travel, organisation, emotional)						
46. I am encouraged to participate in other sports and/or cross train						
47. I am not taught that much about how to balance training, competing and recovery						
48. My coaches talk regularly to the other people who support me in my sport about what I am trying to achieve (e.g. physiotherapist, sport psychologist, nutritionist, strength & conditioning coach, life style advisor etc)						
49. My coach plans training to incorporate a wide variety of useful skills and attributes, for example, techniques, physical attributes, tactical skills, mental skills, decision making						
50. My coach actively develops my understanding of my sport development (e.g. technical, tactical, mental, physical, lifestyle, sport process)						
51. I feel pressure from my mates in sport to do things differently from what my coaches are asking of me						
52. My coach often talks to me about the connections/overlap between different aspects of my training (e.g. technical, tactical, physical & mental development)						
53. I am constantly reminded that my personal dedication and desire to be successful will be the key to how good a performer I become						
54. My coach emphasises the need for constant work on fundamental and basic skills						

	Strongly Agree	Agree	Agree a little bit	Disagree a little bit	Disagree	Strongly Disagree	
55. There are people who help me/teach me how to deal positively with any nerves or worries that I experience (e.g. coaches, parents, psychologists)............................ 55	☐	☐	☐	☐	☐	☐	55
56. My coach is a positive supporting influence on me.................................. 56	☐	☐	☐	☐	☐	☐	56
57. On the whole, my mates (inside and outside of sport) are a positive support network for me... 57	☐	☐	☐	☐	☐	☐	57
58. My training is specifically designed to help me develop effectively in the long term...... 58	☐	☐	☐	☐	☐	☐	58
59. I spend most of my time developing skills and attributes that my coach tells me I will need if I am to compete successfully at the top/professional level............................ 59	☐	☐	☐	☐	☐	☐	59
60. My coach explains how my training and competition programme work together to help me develop... 60	☐	☐	☐	☐	☐	☐	60
61. My coach allows me to learn through making my own mistakes................................ 61	☐	☐	☐	☐	☐	☐	61
62. My coaches and those that support me are good at helping me to develop genuine confidence in myself (e.g. coaches, parents, psychologists etc)................................ 62	☐	☐	☐	☐	☐	☐	62
63. I am encouraged to keep perspective by balancing any frustrations I may have in one area by thinking about good progress in others (e.g. slow skill development but good strength gains or poor performances but good technical development)........................ 63	☐	☐	☐	☐	☐	☐	63
64. I would be given good opportunities even if I experienced a dip in performance............ 64	☐	☐	☐	☐	☐	☐	64
65. My coaches and others who support me in sport are approachable (e.g. physiotherapist, sport psychologist, strength trainer, nutritionist, lifestyle advisor etc)........................ 65	☐	☐	☐	☐	☐	☐	65
66. I often have the opportunity to talk about how more experienced performers have handled the challenges I face... 66	☐	☐	☐	☐	☐	☐	66
67. My progress and personal performance is reviewed regularly on an individual basis...... 67	☐	☐	☐	☐	☐	☐	67
68. My coach emphasises that what I do in training and competition is far more important than winning... 68	☐	☐	☐	☐	☐	☐	68